Owner's Operator and Maintenance Manual

900 Series

DEALER: This manual MUST be given to the user of the wheelchair.

USER: BEFORE using this wheelchair, read this manual and save for future reference.

For more information regarding Invacare products, parts, and services, please visit www.invacare.com

INVACARE

Yes, you can.

⚠ WARNING

A QUALIFIED TECHNICIAN MUST PERFORM THE INITIAL SET UP OF THIS WHEELCHAIR. ALSO, A QUALIFIED TECHNICIAN MUST PERFORM ALL PROCEDURES SPECIFICALLY INDICATED IN THE MANUAL.

WHEELCHAIR USERS: DO NOT SERVICE OR OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING (1) THE OWNER'S OPERATOR AND MAINTENANCE MANUAL AND (2) THE SEATING SYSTEM'S MANUAL (IF APPLICABLE). IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS, AND INSTRUCTIONS, CONTACT INVACARE TECHNICAL SUPPORT BEFORE ATTEMPTING TO SERVICE OR OPERATE THIS EQUIPMENT - OTHERWISE INJURY OR DAMAGE MAY RESULT.

DEALERS AND QUALIFIED TECHNICIANS: DO NOT SERVICE OR OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING (1) THE OWNER'S OPERATOR AND MAINTENANCE MANUAL, (2) THE SERVICE MANUAL (IF APPLICABLE) AND (3) THE SEATING SYSTEM'S MANUAL (IF APPLICABLE). IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS AND INSTRUCTIONS, CONTACT INVACARE TECHNICAL SUPPORT BEFORE ATTEMPTING TO SERVICE OR OPERATE THIS EQUIPMENT - OTHERWISE, INJURY OR DAMAGE MAY RESULT.

NOTE: Updated versions of this manual are available on www.invacare.com.

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REGISTER YOUR PRODUCT

The benefits of registering:

1. Safeguard your investment.
2. Ensure long term maintenance and servicing of your purchase.
3. Receive updates with product information, maintenance tips, and industry news.
4. Invacare can contact you or your provider, if servicing is needed on your product.
5. It will enable Invacare to improve product designs based on your input and needs.

Register ONLINE at www.invacare.com
- or -
Complete and mail the form on the next page

Any registration information you submit will be used by Invacare Corporation only, and protected as required by applicable laws and regulations.

PRODUCT REGISTRATION FORM

Register ONLINE at www.invacare.com - or -
Complete and mail this form

Name _____

Address _____

City _____ **State/Province** _____

Zip/Postal Code _____

Email _____ **Phone No.** _____ Fold here

Invacare Model No. _____ **Serial No.** _____

Purchased From _____ **Date of Purchase:** _____

1. Method of purchase: (check all that apply)
❑ Medicare ❑ Insurance ❑ Medicaid ❑ Other _____

2. This product was purchased for use by: (check one)
❑ Self ❑ Parent ❑ Spouse ❑ Other

3. Product was purchased for use at:
❑ Home ❑ Facility ❑ Other

4. I purchased an Invacare product because:
❑ Price ❑ Features (list features) _____

5. Who referred you to Invacare products? (check all that apply)
❑ Doctor ❑ Therapist ❑ Friend ❑ Relative ❑ Dealer/Provider ❑ Other_____
❑ Advertisement (circle one): TV, Radio, Magazine, Newspaper ❑ No Referral_____

6. What additional features, if any, would you like to see on this product?

_____ Fold here

7. Would you like information sent to you about Invacare products that may be available for a particular medical condition? ❑ Yes ❑ No
If yes, please list any condition(s) here and we will send you information by email and/or mail about any available Invacare products that may help treat, care for or manage such condition(s):

_____

8. Would you like to receive updated information via email or regular mail about the Invacare home medical products sold by Invacare's dealers? ❑ Yes ❑ No

9. What would you like to see on the Invacare website?

_____

10. Would you like to be part of future online surveys for Invacare products? ❑ Yes ❑ No

11. User's Year of birth: _____

If at any time you wish not to receive future mailings from us, please contact us at Invacare Corporation, CRM Department, 39400 Taylor Parkway, Elyria, OH 44035, or fax to 877-619-7996 and we will remove you from our mailing list.

To find more information about our products, visit www.invacare.com.

Cut Along Line

Fold here

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CRM DEPARTMENT
39400 TAYLOR PARKWAY
ELYRIA OH 44035-9836

Fold here

Invacare Product Registration Form

Please Seal with Tape Before Mailing

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SPECIAL NOTES

Signal words are used in this manual and apply to hazards or unsafe practices which could result in personal injury or property damage. Refer to the following table for definitions of the signal words.

SIGNAL WORD	MEANING
DANGER	Danger indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Caution indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE

THE INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE.

WHEELCHAIR USER

As a manufacturer of wheelchairs, Invacare endeavors to supply a wide variety of wheelchairs to meet many needs of the end user. However, final selection of the type of wheelchair to be used by an individual rests solely with the user and his/her healthcare professional capable of making such a selection.

WHEELCHAIR TIE-DOWN RESTRAINTS AND SEAT RESTRAINTS

Wheelchair users should NOT be transported in vehicles of any kind while in wheelchairs. As of this date, the Department of Transportation has not approved any tie-down systems for transportation of a user while in a wheelchair, in a moving vehicle of any type.

It is Invacare's position that users of wheelchairs should be transferred into appropriate seating in vehicles for transportation and use be made of the restraints made available by the auto industry. Invacare cannot and does not recommend any wheelchair transportation systems.

SEAT POSITIONING STRAP

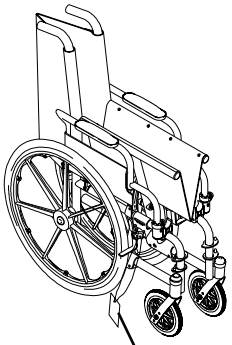
ALWAYS wear your seat positioning strap. Inasmuch as the seat positioning strap is an option on this wheelchair (you may order with or without the seat positioning strap), Invacare strongly recommends ordering the seat positioning strap as an additional safeguard for the wheelchair user. The seat positioning strap is a positioning belt only. It is not designed for use as a safety device withstanding high stress loads such as auto or aircraft safety belts. If signs of wear appear, belt MUST be replaced immediately.

Regarding Restraints - Seat positioning straps - it is the obligation of the DME dealer, therapists and other healthcare professionals to determine if a seating restraint is required to ensure the safe operation of this equipment by the user. Serious injury can occur in the event of a fall from a wheelchair.

⚠ WARNING

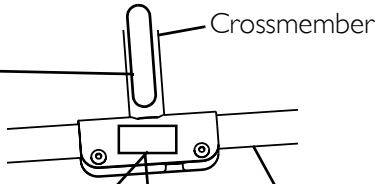
Invacare products are specifically designed and manufactured for use in conjunction with Invacare accessories. Accessories designed by other manufacturers have not been tested by Invacare and are not recommended for use with Invacare products.

LABEL LOCATION



NO WHEELCHAIR HAS BEEN APPROVED FOR USE AS A SEATING SURFACE WITHIN A MOTOR VEHICLE. THIS LABEL IS FOR INFORMATIONAL PURPOSES ONLY. LIABILITY ISSUES WERE NOT CONSIDERED IN THE ATTACHMENT OF THIS LABEL.

AUCUN FAUTEUIL ROULANT N'A ÉTÉ APPROUVÉ POUR ÊTRE UTILISÉ COMME SIÉGE À L'INTÉRIEUR D'UN VÉHICULE MOTORISÉ. CETTE ÉTIQUETTE NE PEUT ÊTRE UTILISÉE QU'À TITRE D'INFORMATION ET N'A PAS ÉTÉ AFFICHÉE ICI POUR DES RAISONS DE RESPONSABILITÉ LEGALE.



IMPORTANT NOTICE

The wheel locks on this wheelchair have been pre-set at the factory to comply with the Veterans Administration functional Standard 8320.01 of the Federal Register, paragraph 3.2.4.5.3. If these wheel locks do not meet your needs, follow instructions below.

⚠ CAUTION

Any wheel lock adjustments should embed wheel lock shoe at least 1/8" into tire when locked (3/16" on pneumatic tires).

INSTRUCTIONS FOR WHEEL LOCK ADJUSTMENTS

1. Loosen wheel lock mounting fastener, which runs through mounting bracket and frame.
2. Slide clamp toward rear wheel until wheel lock shoe is embedded into tire material at least 1/8" when handle is engaged to the lock position (3/16" for pneumatic tires).
3. Tighten mounting fastener to secure mounting bracket in desired location and recheck lock shoe embedding.
4. Inspect for correct locking action BEFORE actual use.

00078X021-0394

WEIGHT CAPACITY
250 LBS. (114 kgs.)
REFER TO OWNER'S MANUAL
P/N 1111013

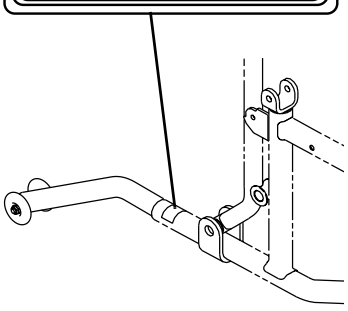
WEIGHT CAPACITY
350 LBS. (159 kgs.)
REFER TO OWNER'S MANUAL
P/N 1111017

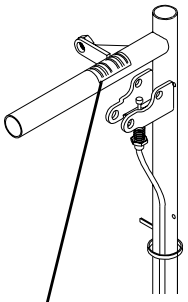
WEIGHT CAPACITY
275 LBS. (125 kgs.)
REFER TO OWNER'S MANUAL
P/N 1111014

WEIGHT CAPACITY
300 LBS. (136 kgs.)
REFER TO OWNER'S MANUAL
P/N 1111016

Recliner Models Only

⚠ WARNING
DO NOT OPERATE WITHOUT THE ANTI-TIP TUBES INSTALLED.
REV. 5/98 P/N 60106X144

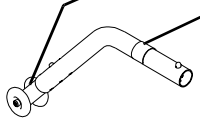




CAUTION
DO NOT recline without occupant. When the chair is not occupied the back will raise abruptly. Keep clear of the chair back when raising or lowering to avoid injury.
1023096

NOTE: On all adjustable anti-tippers

⚠ WARNING
Refer to Owner's Manual for proper anti-tipper setting.
1085379



⚠ WARNING
DO NOT OPERATE WITHOUT THE ANTI-TIP TUBES INSTALLED.
REV. 5/98 P/N 60106X144

TYPICAL PRODUCT PARAMETERS

900	
OVERALL WIDTH*:	22, 23, 24, 25, 26, 27, 28, 29, 30, 31, or 32 inches
OVERALL DEPTH (WITHOUT RIGGINGS)*:	26, 27, 28, 29, 30, 31, 32, 33, 34, or 35 inches
SEAT WIDTH:	14, 15, 16, 17, 18, 19, 20, 21, 22, 23, or 24 inches
SEAT DEPTH:	13, 14, 15, 16, 17, 18, 19, 20, 21 or 22 inches
SEAT-TO-FLOOR ADULT: HEMI: BY FRAME MODIFICATION:	 22 inches 18 inches 19, 21, 22, 23, or 24 inches
BACK STYLE/HEIGHT NON-RECLINING: RECLINING:	 14 - 20 inches or 14 - 24 inches 32 inches (22 inch back + 10 inch removable headrest)
ARM STYLES:	Full or Desk Length - fixed height conventional, adjustable height conventional, fixed height space-saver, adjustable height space-saver
FRONT RIGGINGS:	Swingaway footrests, elevating legrests, and articulating legrests
REAR AXLE:	Permanent
REAR WHEELS:	24**-inch composite with pneumatic, pneumatic-flat free insert or urethane tires
HANDRIMS:	Aluminum**, plastic coated, oblique or vertical projection
WHEEL LOCKS:	Push or pull to lock
CASTER SIZE:	8x1-inch solid rubber**, 8x1¼-inch pneumatic, pneumatic-flat free insert, 8x1¾-inch semi-pneumatic, 8x2-inch pneumatic
UPHOLSTERY:	Vinyl
FRAME COLORS:	Chrome
WEIGHT LIMIT:	250 lbs to 350 lbs depending on wheelchair options, Max weight limit of recliner 350 lbs (159 kg)
FRAME, ARM, BACK, AND SEAT MODIFICATIONS	Dual cross brace, gusseted caster journal, gusseted frame in four places, gussets for dual cross brace, chromoly crossbrace, gussets for chromoly cross brace, gusseted cross brace, dual axle position, 5/8-inch rear-mounted axle, Gussets for 5/8-inch rear axle, reinforced hanger brackets, no hanger brackets, double cross brace with gussets.

**NOTE: These measurements apply to the majority of the wheelchairs including any accessories (excluding the front riggings). Specific accessories may vary the measurements slightly.*

***NOTE: These options are standard for this model.*

NOTE: The seat-to-floor heights are based on urethane tires. If wheelchair is equipped with pneumatic (properly inflated) or solid rubber tires, add ¼-inch to the measurements listed above. These heights can vary +/- ¼-inch due to tire wear and manufacturing tolerances.

SECTION 1—GENERAL GUIDELINES

⚠ WARNING

SECTION 1 - GENERAL GUIDELINES contains important information for the safe operation and use of this product. DO NOT use this product or any available optional equipment without first completely reading and understanding these instructions and any additional instructional material such as owner's manuals, service manuals or instruction sheets supplied with this product or optional equipment. If you are unable to understand the Warnings, Cautions or Instructions, contact a healthcare professional, dealer or technical personnel before attempting to use this equipment. Otherwise, injury or damage may occur.

Information for Healthcare Professionals/Assistants

Make sure the occupant is properly positioned in the wheelchair before reclining or inclining (sitting up) to maintain maximum stability and safety. (Refer to Safety/Handling of Wheelchairs on page 17).

Make sure occupant's hands and body are clear of all pinch points before reclining back. Pinch points exist between spreader bar and recliner mechanism. Use caution, otherwise injury may occur.

ALWAYS engage both wheel locks while reclining or inclining (sitting up) the wheelchair.

When returning the occupant of the reclining back wheelchair to the full upright position, more body strength will be required for approximately the last twenty degrees of incline (sitting up). Make sure to use proper body mechanics (use your legs) or seek assistance if necessary to avoid injury.

DO NOT attempt to recline or incline the wheelchair back without occupant. Back will raise abruptly and cause injury. Keep clear when reclining or inclining chair back to avoid injury.

Stability - All Models

The seat depth, back height/angle, seat angle, size of the front casters, position of the rear wheels, anti-tipper model, as well as the user condition directly relate to the stability of the wheelchair. Any change to one or any combination of the ten may cause the wheelchair to decrease in stability. These adjustments MUST be performed by a qualified technician.

NOTE: When changes to the left hand column occur, follow across the chart and refer to the X procedure to maintain the proper stability, safety and handling of the wheelchair.	BACK HEIGHT	SEAT DEPTH	BACK ANGLE	SEATING SYSTEM	SEAT ANGLE	CASTER SIZE	CASTER POSITION	WHEEL SIZE	WHEEL POSITION	USER CONDITION	WHEEL LOCKS	ANTI-TIPPERS*
BACK HEIGHT	•	N/A	N/A	N/A	N/A	N/A	N/A	N/A	X	N/A	N/A	N/A
SEAT DEPTH	N/A	•	N/A	X	X	N/A	N/A	N/A	X	N/A	N/A	N/A
BACK ANGLE	N/A	N/A	•	X	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SEATING SYSTEM	X	X	X	•	X	N/A	N/A	N/A	X	X	N/A	N/A
SEAT ANGLE	X	X	X	X	•	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CASTER SIZE	N/A	N/A	N/A	N/A	X	•	N/A	N/A	N/A	N/A	N/A	X
CASTER POSITION	N/A	N/A	N/A	N/A	X	X	•	N/A	X	N/A	N/A	X
WHEEL SIZE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•	X	N/A	X	X
WHEEL POSITION	N/A	N/A	N/A	N/A	X	N/A	N/A	N/A	•	N/A	X	X
USER CONDITION	N/A	X	N/A	X	N/A	N/A	N/A	N/A	X	•	N/A	N/A
SEAT HEIGHT	N/A	N/A	N/A	X	X	N/A	N/A	N/A	X	N/A	X	X

The various seat-to-floor heights require specific settings depending on rear wheel size, rear wheel position, and front caster size/position. These adjustments MUST be performed by a qualified technician.

Stability - Recliner Models Only

ALWAYS make sure that the wheelchair is stable before using the recliner option.

ALWAYS ensure the spreader bar is attached and secured before using the recliner option.

ALWAYS return the back to the upright position before lifting the wheelchair.

Anti-Tippers

Anti-tippers are specific to the options on wheelchair (recliner/non-recliner). Refer to the chart in Installing/Adjusting Anti-tippers on page 46 for correct usage and adjustment. If these requirements cannot be achieved, DO NOT use the wheelchair. Contact a qualified technician.

ALWAYS use anti-tippers. When outdoors on wet, soft ground or on gravel surfaces, anti tippers may not provide the same level of protection against tipover. Extra caution must be observed when traversing such surfaces.

Operating Information

Unless otherwise noted, all service and adjustment should be performed while the wheelchair is unoccupied.

To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional before attempting active use of the wheelchair.

When cleaning rear cane or hand grip areas use only a clean towel lightly dampened with cool water. Verify that grips are dry prior to use. Use of soap or ammonia based cleaning solutions will result in the hand grips sliding off the cane assembly. Failure to observe this warning may result in injury to the user or bystanders.

If the wheelchair is exposed to extreme temperature (above 100°F or below 32°F), high humidity and/or becomes wet, prior to use, ensure that the handgrips do not twist on the handle. Otherwise, damage or injury may occur.

DO NOT sit or transfer into the wheelchair unless it is fully open and the seat frame rails are fully seated into the side frame H-blocks.

Avoid storing or using the wheelchair near open flame or combustible products. Serious injury or damage to property may result.

DO NOT traverse, climb or go down ramps or slopes greater than 9°.

DO NOT attempt to move up or down an incline with a water, ice or oil film.

DO NOT operate on roads, streets or highways.

DO NOT attempt to ride over curbs or obstacles. Doing so may cause your wheelchair to tip over and cause bodily harm to you or damage to the wheelchair.

DO NOT attempt to reach objects if you have to move forward in the seat.

DO NOT attempt to reach objects if you have to pick them up from the floor by reaching down between your knees.

DO NOT lean over the top of the back upholstery to reach objects behind you, as this may cause the wheelchair to tip over.

DO NOT shift your weight or sitting position toward direction you are reaching as the wheelchair may tip over.

DO NOT attempt to stop a moving wheelchair with wheel locks. Wheel locks are not brakes.

DO NOT tip the wheelchair without assistance.

DO NOT use an escalator to move a wheelchair between floors. Serious bodily injury may occur.

Before attempting to transfer in or out of the wheelchair, every precaution should be taken to reduce the gap distance. Turn both casters parallel to the object you are transferring onto. When transferring to and from the wheelchair, ALWAYS engage both wheel locks.

DO NOT attempt to lift the wheelchair by any removable (detachable) parts. Lifting by means of any removable (detachable) parts of the wheelchair may result in injury to the user or damage to the wheelchair.

RECLINER ONLY - DO NOT use the spreader bar to lift the wheelchair. Refer to Storing/Replacing Spreader Bar on page 51.

DO NOT stand on the frame of the wheelchair.

DO NOT use the footplate as a platform. When getting in or out of the wheelchair, make sure that the footplates are in the upward position.

ALWAYS use the handrims for self-propulsion. Inasmuch as the HANDRIMS are an option on this wheelchair (you may order with or without the handrims), Invacare strongly recommends ordering the handrims as an additional safeguard for the wheelchair user.

Make sure detent balls of the quick-release pin are fully released before operating the wheelchair.

The detent balls MUST be protruding past the top of the seat plate assembly for a positive lock.

Keep detent balls clean.

Tire Pressure

DO NOT use your wheelchair unless it has the proper tire pressure (p.s.i.). DO NOT overinflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm. The recommended tire pressure is listed on the side wall of the tire.

Replacement of a pneumatic tire or tube MUST be performed by a qualified technician.

Weight Training

Invacare does not recommend the use of its wheelchairs as a weight training apparatus. Invacare wheelchairs have not been designed or tested as a seat for any kind of weight training. If occupant uses said wheelchair as a weight training apparatus, Invacare shall not be liable for bodily injury or damage to the wheelchair and the warranty is void.

Weight Limitation

ALWAYS verfiy the specific weight limitation of the wheelchair by referring to the chart in Typical Product Parameters on page 12, as well as on the weight capacity label on the wheelchair. Refer to Label Location on page 11 for the placement of the weight capacity label.

Non-Recliner Models: The base weight limitation of the 900 series wheelchair is 250 lbs. The wheelchair may have an increased weight limitation up to 350 lbs depending on frame modifications and options added to wheelchair.

Recliner Models: The base weight limitation of the 900 series wheelchair with recliner back option is 250 lbs. The wheelchair may have an increased weight limitation up to 350 lbs depending on frame modifications and options added to wheelchair.

SECTION 2—SAFETY/HANDLING OF WHEELCHAIRS

Safety/Handling of Wheelchairs

Safety and handling of the wheelchair require the close attention of the wheelchair user as well as the assistant. This manual points out the most common procedures and techniques involved in the safe operation and maintenance of the wheelchair. It is important to practice and master these safe techniques until you are comfortable in maneuvering around the frequently encountered architectural barriers.

Use this information only as a basic guide. The techniques that are discussed on the following pages have been used successfully by many.

Individual wheelchair users often develop skills to deal with daily living activities that may differ from those described in this manual. Invacare recognizes and encourages each individual to try what works best for him/her in overcoming architectural obstacles that they may encounter. However, all warnings and cautions given in this manual MUST be heeded. Techniques in this manual are a starting point for the new wheelchair user and assistant with "safety" as the most important consideration for all.

Stability and Balance

ALWAYS wear your seat positioning strap. Inasmuch as the seat positioning strap is an option on this wheelchair (you may order with or without the seat positioning strap), Invacare strongly recommends ordering the seat positioning strap as an additional safeguard for the wheelchair user. The seat positioning strap is a positioning belt only. It is not designed for use as a safety device withstanding high stress loads such as auto or aircraft safety belts. If signs of wear appear, belt MUST be replaced immediately.

To assure stability and proper operation of your wheelchair, you MUST maintain proper balance at all times. Your wheelchair has been designed to remain upright and stable during normal daily activities as long as you do not move beyond the center of gravity.

Virtually all activities which involve movement in the wheelchair have an effect on the center of gravity. Invacare recommends using seat/chest positioning straps for additional safety while involved in activities that shift your weight.

DO NOT lean forward out of the wheelchair any further than the length of the armrests. Make sure the casters are pointing in the forward position whenever you lean forward. This can be achieved by advancing the wheelchair and then reversing it in a straight line.

Coping With Everyday Obstacles

Coping with the irritation of everyday obstacles can be alleviated somewhat by learning how to manage your wheelchair. Keep in mind your center of gravity to maintain stability and balance.

A Note to Wheelchair Assistants

When assistance to the wheelchair user is required, remember to use good body mechanics. Keep your back straight and bend your knees whenever tipping the wheelchair or traversing curbs, or other impediments.

DO NOT attempt to lift the wheelchair by any removable (detachable) parts. Lifting by means of any removable (detachable) parts of the wheelchair may result in injury to the user or damage to the wheelchair.

ALWAYS check hand grips for looseness before using the wheelchair. If loose and/or worn, replace immediately.

RECLINER ONLY - DO NOT use the spreader bar to lift the wheelchair.

Also, be aware of detachable parts such as the spreader bar (recliner only), armrests or legrests. These must NEVER be used to move the wheelchair or as lifting supports, as they may be inadvertently released, resulting in possible injury to the user and/or assistant(s).

When learning a new assistance technique, have an experienced assistant help you before attempting it alone.

⚠ WARNING

DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.

The seat depth, back height/angle, seat angle, size of the front casters, position of the rear wheels, anti-tipper model, as well as the user condition directly relate to the stability of the wheelchair. Any change to one or any combination of the ten may cause the wheelchair to decrease in stability. These adjustments must be performed by a qualified technician.

Many activities require the wheelchair owner to reach, bend and transfer in and out of the wheelchair. These movements will cause a change to the normal balance, the center of gravity, and the weight distribution of the wheelchair. To determine and establish your particular safety limits, practice bending, reaching and transferring activities in several combinations in the presence of a qualified healthcare professional before attempting active use of the wheelchair.

Proper positioning is essential for your safety. When reaching, leaning, or bending forward, it is important to use the front casters as a tool to maintain stability and balance.

Reaching, Leaning and Bending Forward

⚠ WARNING

DO NOT attempt to reach objects if you have to move forward in the seat or pick them up from the floor by reaching down between your knees.

NOTE: For this procedure, refer to FIGURE 2.1.

Position the front casters so that they are extended as far forward as possible and engage wheel locks.

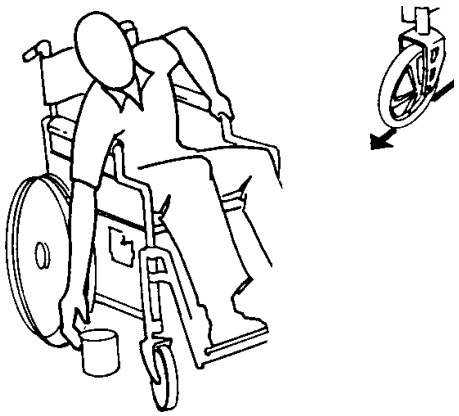


FIGURE 2.1 Reaching, Leaning and Bending Forward

Reaching, Leaning Backwards

⚠ WARNING

DO NOT lean over the top of the back upholstery to reach objects behind you, as this may cause the wheelchair to tip over.

NOTE: For this procedure, refer to FIGURE 2.2.

Position wheelchair as close as possible to the desired object. Point front casters forward to create the longest possible wheelbase. Reach back only as far as your arm will extend without changing your sitting position.

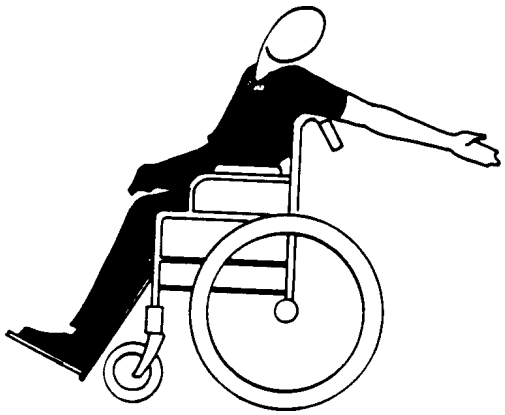


FIGURE 2.2 Reaching, Leaning Backwards

Tipping

⚠ WARNING

DO NOT tip the wheelchair without assistance.

ALWAYS check hand grips for looseness before using the wheelchair. If loose and/or worn, replace immediately.

When tipping the wheelchair, an assistant should grasp the back of the wheelchair on a non-removable (non-detachable) part. Inform the wheelchair occupant before tipping the wheelchair and remind him/her to lean back. Be sure the occupant's feet and hands are clear of all wheels and/or pinch points.

After mastering the techniques of tipping the wheelchair, use one of the following methods to tackle curbs, short stairs, etc.

Method 1 - Wheelchair With Step Tubes

NOTE: For this procedure, refer to FIGURE 2.3.

Place foot on the step tube and begin to tilt the wheelchair toward you. Apply a continuous downward motion until the balance point is achieved and the front casters clear the curb. At this point, the assistant will feel a difference in the weight distribution.

⚠ WARNING

When lowering the front casters of the wheelchair, DO NOT let the wheelchair drop the last few inches to the ground. This could result in injury to the occupant and/or damage to the wheelchair.

Roll the wheelchair forward and slowly lower the front of the wheelchair in one continuous movement onto the sidewalk. Push the wheelchair forward until the rear wheels roll up and over the curb.

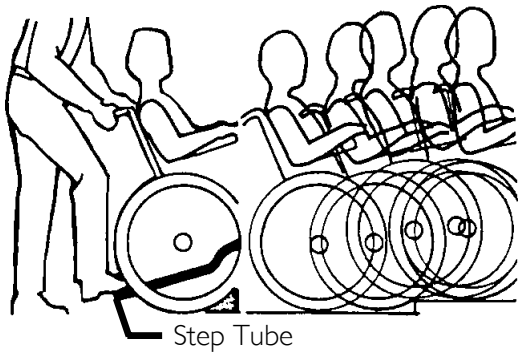


FIGURE 2.3 Method 1 - Wheelchair With Step Tubes

Method 2 - Wheelchair Without Step Tubes

NOTE: For this procedure, refer to FIGURE 2.4.

This method requires two assistants. The second assistant should be positioned at the front of the wheelchair lifting upward on a non-removable (non-detachable) part of the wheelchair frame when lifting the wheelchair and stabilizing the wheelchair when the wheelchair is being lowered to the ground.

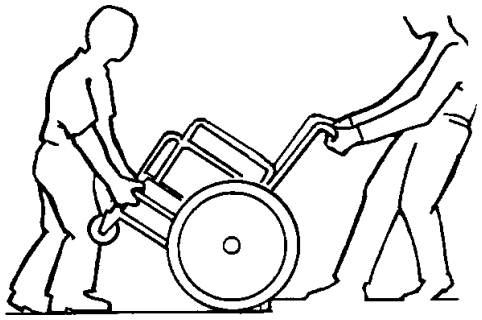


FIGURE 2.4 Method 2 - Wheelchair Without Step Tubes

The first assistant should stand on the sidewalk and turn the wheelchair so that the rear wheels are against the curb. Turn the anti-tippers so the anti-tip wheels are pointing up. The wheelchair should be tilted back to the balance point and, in one continuous upward movement, the rear wheels should be pulled up and over the curb. DO NOT return the front casters to the ground until the wheelchair has been pulled backward far enough for the front casters to clear the edge of the curb.

⚠ WARNING

When lowering the front casters of the wheelchair, DO NOT let the wheelchair drop the last few inches to the ground. This could result in injury to the occupant and/or damage to the wheelchair.

Roll the wheelchair backward and slowly lower the wheelchair in one continuous movement. Turn the anti-tippers so the anti-tip wheels are facing down.

Stairways

⚠ WARNING

ALWAYS wear your seat positioning strap. Inasmuch as the seat positioning strap is an option on this wheelchair (you may order with or without the seat positioning strap), Invacare strongly recommends ordering the seat positioning strap as an additional safeguard for the wheelchair user. The seat positioning strap is a positioning belt only. It is not designed for use as a safety device withstanding high stress loads such as auto or aircraft safety belts. If signs of wear appear, belt MUST be replaced immediately.

DO NOT attempt to lift a wheelchair by lifting on any removable (detachable) parts. Lifting by means of any removable (detachable) parts of the wheelchair may result in injury to the user or damage to the wheelchair.

ALWAYS check hand grips for looseness before using the wheelchair. If loose and/or worn, replace IMMEDIATELY.

Extreme caution is advised when it is necessary to move an occupied wheelchair up or down the stairs. Invacare recommends that, if possible, the user be removed from the wheelchair prior to moving. Invacare recommends using two assistants and making thorough preparations. Make sure to use only secure, non-detachable parts for hand-held supports.

Recliner only - ALWAYS return the back to the upright position before lifting the wheelchair.

NOTE: For this procedure, refer to FIGURE 2.5.

Follow this procedure for moving the wheelchair between floors when an elevator is not available:

1. If necessary, rotate the anti-tippers so the wheels are facing up.
2. After the wheelchair has been tilted back to the balance point, one assistant (in the rear) backs the wheelchair up against the first step, while securely grasping a non-removable (non-detachable) part of the wheelchair for leverage.

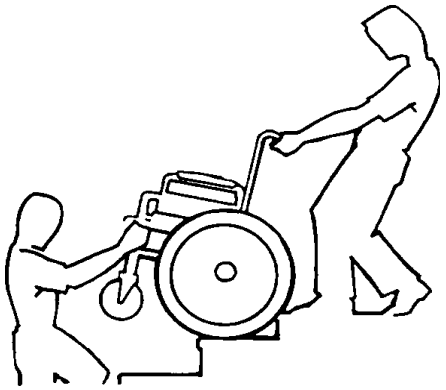


FIGURE 2.5 Stairways

3. The second assistant, with a firm hold on a non-detachable part of the framework, lifts the wheelchair up and over the stair and steadies the wheelchair as the first assistant places one foot on the next stair and repeats STEP 1.
4. The wheelchair should not be lowered until the last stair has been negotiated and the wheelchair has been rolled away from the stairway.
5. If necessary, rotate the anti-tippers so the wheels are facing down.

Escalators

⚠ WARNING

DO NOT use an escalator to move a wheelchair between floors. Serious bodily injury may occur.

Transferring To and From Other Seats

⚠ WARNING

Before attempting to transfer in or out of the wheelchair, every precaution should be taken to reduce the gap distance. Turn both casters parallel to the object you are transferring onto. Also be certain the wheel locks are engaged to help prevent the wheels from moving.

CAUTION

When transferring, position yourself as far back as possible in the seat. This will help prevent damaged upholstery and the possibility of the wheelchair tipping forward.

NOTE: For this procedure, refer to FIGURE 2.6.

NOTE: This activity may be performed independently provided you have adequate mobility and upper body strength.

Position the wheelchair as close as possible alongside the seat to which you are transferring, with the front casters pointing parallel to it. Remove or flip up the armrest. Engage wheel locks. Swing away or remove front rigging. Shift body weight into seat with transfer.

During independent transfer, little or no seat platform will be beneath you. Use a transfer board if at all possible.

FIGURE 2.6 Transferring To and From Other Seats

Unfolding and Folding Wheelchair

⚠ WARNING

ALWAYS keep hands and fingers clear of moving parts to avoid injury.

DO NOT place hand or fingers on the underside of the seat frame rail when opening or closing the wheelchair.

DO NOT sit or transfer into the wheelchair unless it is fully open and the seat frame rails are fully seated into the side frame H-blocks.

NOTE: For this procedure, refer to FIGURE 2.7.

Unfolding

1. Tilt the wheelchair toward you (raising the opposite wheel and caster off the ground/floor).
2. Place your hand on the top of the seat rail closest to you where the seat upholstery is attached.
3. Point your fingers and thumb to the inside of the wheelchair.

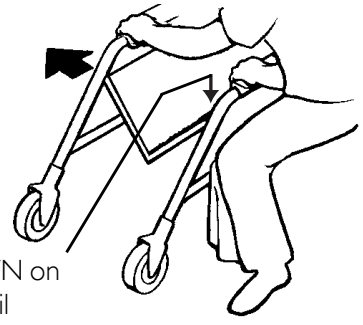


FIGURE 2.7 Unfolding and Folding Wheelchair

4. Press downward on the top of the seat rail until the wheelchair is fully open and the seat rails are fully seated in the H-blocks.
5. Recliners only - Secure the detached end of the spreader bar to the side frame. Refer to Storing/Replacing Spreader Bar on page 51.
6. Engage both wheel locks, open the footrest/legrest for clearance and transfer into the wheelchair. Refer to Transferring To and From Other Seats on page 22.

Folding Hammock or Sling Seat Models.

NOTE: For this procedure, refer to FIGURE 2.8.

1. Recliners only - Detach one end of the spreader bar from the side frame. Refer to Storing/Replacing Spreader Bar on page 51.
2. Swing footrest/legrest in locked position to the front of the wheelchair.
3. Pivot footplates upward to vertical position.
4. With both hands, grasp the middle of the seat upholstery at the front and back edge and lift up.
5. Continue to close the wheelchair by grasping the armrest furthest from you and pulling the armrest towards you.

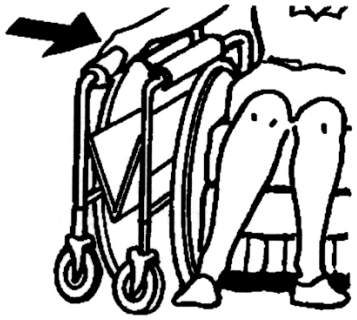


FIGURE 2.8 Folding Hammock or Sling Seat Models.

Folding Solid-Seat Models

NOTE: For this procedure, refer to FIGURE 2.9

1. Recliners only - Detach one end of the spreader bar from the side frame. Refer to Storing/Replacing Spreader Bar on page 51.
2. Swing footrest/legrest in locked position to the front of the wheelchair.
3. Pivot footplates upward to vertical position.

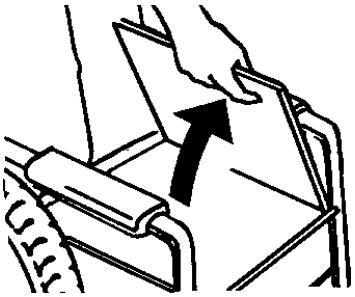


FIGURE 2.9 Folding Solid-Seat Models

4. From behind the wheelchair, grasp the right hand edge of the solid seat.
5. Raise the seat to the hinged side.
6. With both hands, grasp the middle of the front and back edges of the solid folding seat and lift up until the wheelchair begins to close.
7. Continue to close the wheelchair by grasping the armrest furthest from you and pulling the armrest towards you.

SECTION 3—SAFETY INSPECTION/TROUBLESHOOTING

NOTE: Every six months or as necessary, take your wheelchair to a qualified technician for a thorough inspection and servicing. Regular cleaning will reveal loose or worn parts and enhance the smooth operation of your wheelchair. To operate properly and safely, your wheelchair must be cared for just like any other vehicle. Routine maintenance will extend the life and efficiency of your wheelchair.

Safety Inspection Checklist

Initial adjustments should be made to suit your personal body structure and preference. Thereafter follow these maintenance procedures:

Inspect/Adjust Initially

- ❑ Ensure that the wheelchair rolls straight (no excessive drag or pull to one side).
- ❑ Inspect for loose or missing hardware on frame and crossbraces.
- ❑ Inspect for bent frame or crossbraces.
- ❑ Check that the wheel locks do not interfere with tires when rolling.
- ❑ Check that the wheel lock pivot points are free of wear and looseness.
- ❑ Check that the wheel locks are easy to engage.
- ❑ Ensure that the wheel locks prevent the wheelchair from moving when engaged.
- ❑ Inspect the seat and back for rips and sagging.
- ❑ Inspect the seat and back for loose or broken hardware.
- ❑ Inspect the back cane hand grips for wear/looseness/deterioration.
- ❑ Inspect seat positioning strap for any signs of wear. Ensure buckle latches. Verify hardware that attaches strap to frame is secure and undamaged. Replace if necessary.
- ❑ Inspect tires for flat spots and wear.
- ❑ Check pneumatic tires for proper inflation.

CAUTION

As with any vehicle, check the wheels and tires periodically for cracks and wear. Replace if damaged.

- ❑ If equipped, check that quick-release axles lock properly. Lubricate if necessary.
- ❑ Check that there is no excessive side movement or binding in the rear wheels when lifted and spun.
- ❑ Inspect rear wheels for cracked, bent or broken spokes.

- ❑ Ensure all spokes are uniformly tight.
- ❑ Inspect handrims for signs of rough edges or peeling.
- ❑ Inspect axle assembly for proper tension by spinning caster. Caster should come to a gradual stop.
- ❑ Adjust front casters/forks bearing system if wheel wobbles noticeably or binds to a stop.
- ❑ Ensure wheel bearings are clean and free of moisture.
- ❑ Check headtube locknuts for tightness.
- ❑ Inspect casters for cracks and wear.
- ❑ Inspect front casters for cracked, bent or broken spokes.
- ❑ Clean upholstery and armrests.

Inspect/Adjust Weekly

- ❑ Ensure that the wheel locks prevent the wheelchair from moving when engaged.
- ❑ Inspect tires for flat spots and wear.
- ❑ Check pneumatic tires for proper inflation.
- ❑ If equipped, check that quick-release axles lock properly. Lubricate if necessary.
- ❑ Inspect rear wheels for cracked, bent or broken spokes.
- ❑ Ensure all spokes are uniformly tight.
- ❑ Inspect axle assembly for proper tension by spinning caster. Caster should come to a gradual stop.
- ❑ Inspect front caster for cracked, bent or broken spokes.

Inspect/Adjust Monthly

- ❑ Ensure that the wheelchair rolls straight (no excessive drag or pull to one side).
- ❑ Check that the wheel locks do not interfere with tires when rolling.
- ❑ Check that the wheel lock pivot points are free of wear and looseness.
- ❑ Inspect seat and back for loose or broken hardware.
- ❑ Inspect seat positioning strap for any signs of wear. Ensure buckle latches. Verify hardware that attaches strap to frame is secure and undamaged. Replace if necessary.
- ❑ Inspect back cane hand grips for wear/looseness/deterioration.
- ❑ Adjust front casters/forks bearing system if wheel wobbles noticeably or binds to a stop.
- ❑ Ensure wheel bearings are clean and free of moisture.
- ❑ Check headtube locknuts for tightness.

Inspect/Adjust Periodically

- ❑ Inspect frame and crossbraces for loose or missing hardware.
- ❑ Inspect for bent frame or crossbraces.
- ❑ Check that wheel locks are easy to engage.
- ❑ Inspect seat and backs for rips and sagging.
- ❑ Check that there is no excessive side movement or binding in the rear wheels when lifted and spun.
- ❑ Inspect handrims for signs of rough edges or peeling.
- ❑ Adjust front casters/forks bearing system if wheel wobbles noticeably or binds to a stop.
- ❑ Ensure wheel bearings are clean and free of moisture.
- ❑ Inspect casters for cracks and wear.
- ❑ Ensure that casters are free of debris.
- ❑ Clean upholstery and armrests.
- ❑ Check that all labels are present and legible. Replace if necessary.

Troubleshooting

Chair Veers Right/ Left	Chair 3 Wheels	Sluggish Turn or Performance	Casters Flutter	Squeaks and Rattles	Looseness in Chair	Solutions
X	X	X	X			Check tires for correct and equal pressure
		X	X	X	X	Check for loose nuts and bolts.
X	X		X			Check caster headtube angle.
X	X					Check that rear wheels are equally spaced away from seat frame.

Maintenance

Maintenance Safety Precautions

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may result.

CAUTION

DO NOT overtighten hardware attaching to the frame. This could cause damage to the frame tubing.

Suggested Maintenance Procedures

1. Before using your 900 Series wheelchair, make sure all nuts and bolts are tight. Check all parts for damage or wear and replace. Check all parts for proper adjustment.

⚠ WARNING

DO NOT use the wheelchair unless it has the proper tire pressure (p.s.i.). DO NOT overinflate the tires. Failure to follow these suggestions may cause the tire to explode and cause bodily harm.

2. If tires are pneumatic, recommended tire pressure is listed on the sidewall of the tire.

CAUTION

As with any vehicle, the rear wheels, casters and tires should be checked periodically for cracks and wear, and should be replaced if damaged.

3. The rear wheels, casters and tires should be checked periodically for cracks and wear, and should be replaced by a qualified technician if damaged.

NOTE: Tire wear is excessive if:

- Pneumatic Tires - there is missing tread or the tires are bald.
- Urethane Tires - there are cuts, surface defects or the tires are loose on the rims.
- Rubber Tires - 30% or more of the tire has worn away.

NOTE: Invacare recommends that tires and casters be replaced every five years.

4. Periodically adjust wheel locks in correlation to tire wear. Refer to Adjusting Patient-Operated Wheel Locks on page 56.
5. Periodically check handrims to ensure they are secured to the rear wheels. If loose, have them tightened by a qualified technician.
6. Periodically check caster wheel bearings to make sure they are clean and free from moisture. Use a Teflon™ lubricant if necessary.

⚠ WARNING

When cleaning rear cane or hand grip areas use only a clean towel lightly dampened with cool water. Verify that grips are dry prior to use. Use of soap or ammonia based cleaning solutions will result in the hand grips sliding off the cane assembly. Failure to observe this warning may result in injury to the user or bystanders.

7. Hand grips should be checked monthly for wear/looseness/deterioration. Clean if desired. Replace if looseness or deterioration is found.
8. Check upholstery for sagging, rips or tears.

SECTION 4—FRONT RIGGINGS

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

Installing/Removing Front Riggings

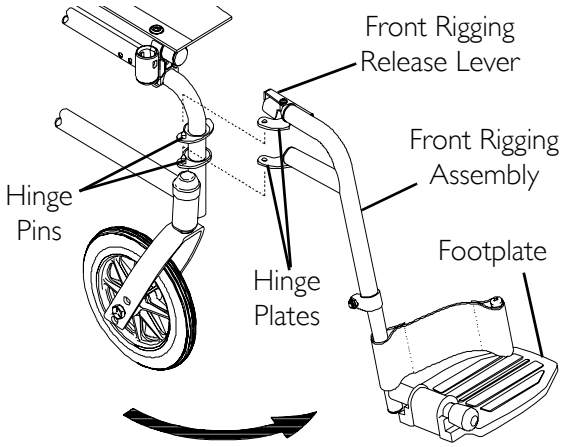
NOTE: For this procedure, refer to FIGURE 4.1.

Installing

1. Turn the front rigging assembly to the side (open front rigging is perpendicular to wheelchair).
2. Install the hinge plates on the front rigging assembly onto the hinge pins on the wheelchair frame.
3. Push the front rigging assembly towards the inside of the wheelchair until it locks into place.

NOTE: The footplate will be on the inside of the wheelchair when locked in place.

4. Repeat this procedure for the other front rigging assembly.
5. To release the front rigging, push the front rigging release lever inward, rotate front rigging outward.



NOTE: Swingaway footrest shown.

FIGURE 4.1 Installing/Removing Front Riggings

Removing

1. Push the front rigging release lever inward
2. Rotate swingaway front rigging assembly outward.
3. Lift the swingaway front rigging assembly off the hinge pins.

Adjusting Footplate Height

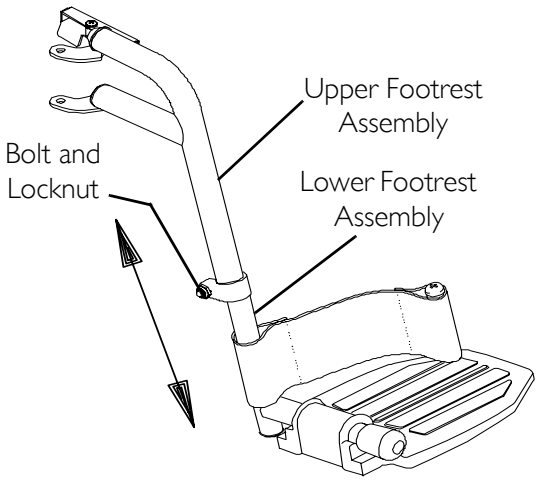
NOTE: For this procedure, refer to FIGURE 4.2.

NOTE: This procedure applies to the swingaway front riggings and swingaway elevating legrest.

1. Remove the swingaway footrest assembly. Refer to Installing/Removing Front Riggings on page 30.

NOTE: Lay the assembly on a flat surface to simplify this procedure.

2. Remove impact guards and/or calf strap, if necessary.
3. Loosen, but DO NOT remove the bolt and locknut that secure the lower footrest assembly to the upper footrest support.
4. Reposition the lower footrest assembly to the desired height.
5. Securely tighten the bolt and locknut.
6. Repeat this procedure for the other footrest, if necessary.
7. Replace impact guards and/or calf strap, if necessary.
8. Reinstall the swingaway footrest assembly. Refer to Installing/Removing Front Riggings on page 30.



NOTE: Swingaway footrest shown.

FIGURE 4.2 Adjusting Footplate Height

Adjusting the Quad Release Lever (93ST Legrests Only)

NOTE: For this procedure, refer to FIGURE 4.3.

1. With the legrest installed on the wheelchair, loosen the jam nut located on the adjustment screw.
2. Loosen/tighten the adjustment screw to desired release lever tension.
3. Tighten the jam nut against the release lever.
4. If necessary, repeat STEPS 1-3 to adjust the remaining quad release lever.

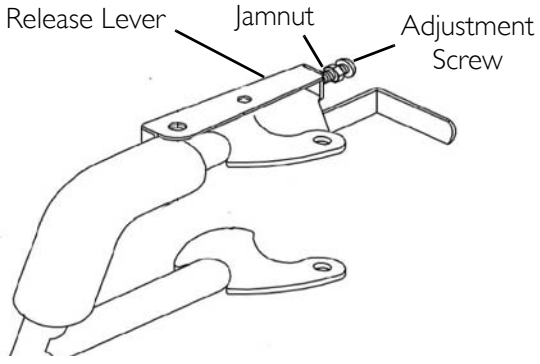


FIGURE 4.3 Adjusting the Quad Release Lever (93ST Legrests Only)

Raising/Lowering Elevating and Articulating Legrest Assemblies

⚠ WARNING

Ensure hands and fingers are clear of elevating legrest mechanism before pushing release lever to lower the elevating legrest. Otherwise injury may occur due to pinch points.

The wheelchair user's leg MUST be supported by an assistant before attempting to lower legrest.

NOTE: For this procedure, refer to FIGURE 4.4.

1. To raise the elevating legrest, the assistant should hold the support tube and raise the elevating legrest until the desired height is obtained.
2. To lower the elevating legrest, perform the following:
   A. Support user leg with one hand.
   B. Push release lever downward with other hand.
   C. Gently, lower user leg down and rest against the legrest.

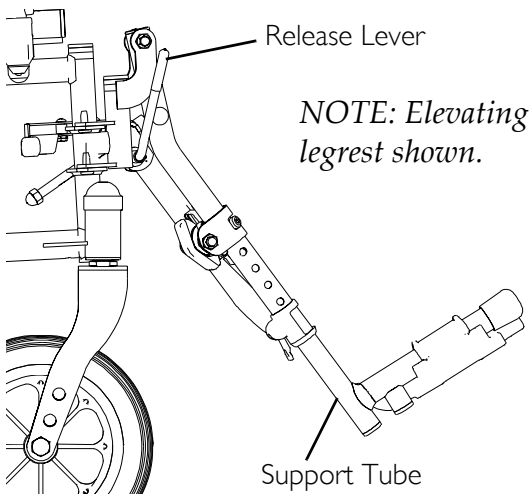


FIGURE 4.4 Raising/Lowering Elevating and Articulating Legrest Assemblies

Adjusting the Calfpad

NOTE: For this procedure, refer to FIGURE 4.5.

1. Turn pad towards the outside of the wheelchair to the up position.
2. Slide the calfpad up or down until the desired position is obtained.
3. Turn the calfpad towards the inside of the wheelchair to the down position.

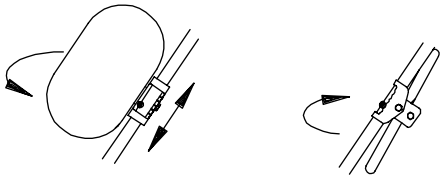


FIGURE 4.5 Adjusting the Calfpad

Installing Impact Guards/Calf Strap

NOTE: For this procedure, refer to FIGURE 4.6.

1. Remove impact guard/calf strap from packaged container if not already secured to the footrest.
2. Secure one impact guard to the each footrest.

NOTE: Ensure the upper portion of the impact guard is between the two horizontal supports of the footrest.

3. Secure one side of the calf strap around each footrest (with the impact guards attached, if present).

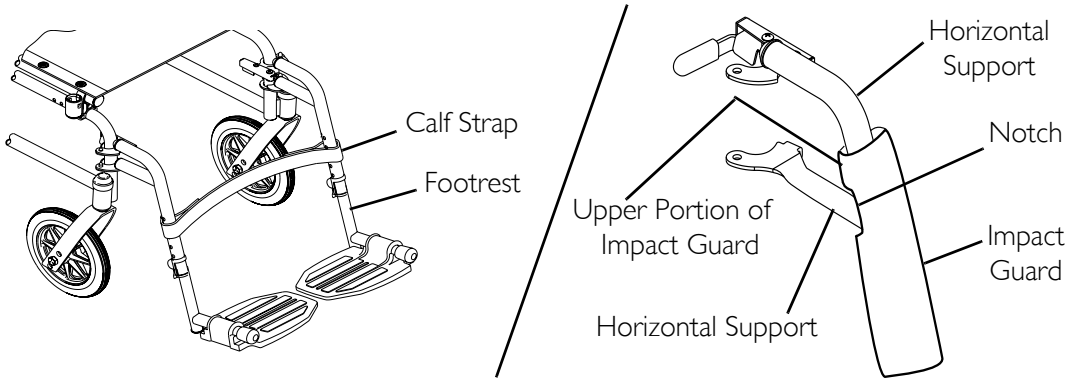


FIGURE 4.6 Installing Impact Guards/Calf Strap

Replacing Heel Loop

NOTE: For this procedure, refer to FIGURE 4.7.

1. Loosen, but DO NOT remove the bolt and locknut that secure the lower half of the footrest to the swingaway footrest assembly.
2. Remove the lower footrest assembly.
3. Remove the mounting screw and locknut that secure the heel loop to the footrest.
4. Slide heel loop over cane of the footrest assembly.
5. Replace heel loop.
6. Reverse STEPS 1-4 to reassemble.

NOTE: When attaching the heel loop to the footrest assembly, tighten the mounting screw and locknut until the spacer is secure.

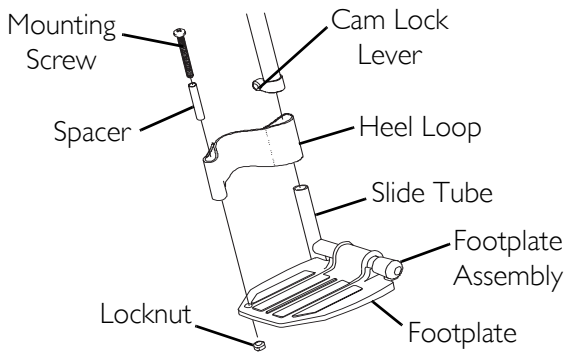


FIGURE 4.7 Replacing Heel Loop

SECTION 5—ARMS

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

Adjusting Armrest Height

⚠ WARNING

Make sure the height adjustment lever is in the locked position before using the wheelchair.

NOTE: For this procedure, refer to FIGURE 5.1.

1. Unlock the armrest by flipping the height adjustment lever on the top front of the armrest to the up (horizontal) position.
2. Adjust armrest to one of five positions.

NOTE: Height adjustment lever MUST be in the unlocked position when placing armrest into the arm assembly.

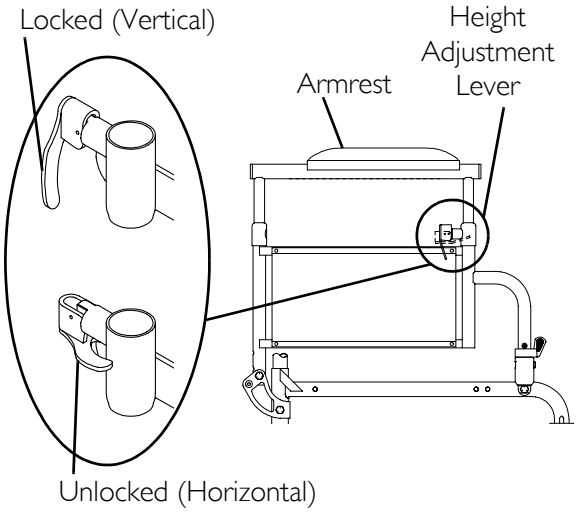


FIGURE 5.1 Adjusting Armrest Height

3. Lock the armrest by pressing the height adjustment lever into the down (vertical) position when the desired armrest height is achieved.
4. Repeat STEPS 1-3 for other armrest.

Using Swing-Back Arms

⚠ WARNING

Make sure the armrest release lever is in the locked position before using the wheelchair.

NOTE: For this procedure, refer to FIGURE 5.2 on page 35.

1. Unlock the swing-back arms by rotating the armrest release lever toward the outside of the wheelchair.

2. Pull the front of the swing-back arm straight up/out of the arm socket and towards the rear of the wheelchair.
3. To use the swing-back arm, push the swing-back arm towards the front of the wheelchair and then downward into the arm socket.

NOTE: Armrest release lever MUST be in the unlocked position when placing armrest into the arm sockets.

4. Lock the swing-back arms by rotating the armrest release lever towards the inside of the wheelchair.

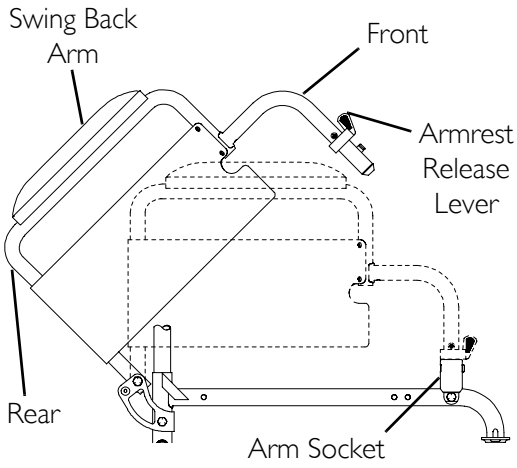


FIGURE 5.2 Using Swing-Back Arms

Removing or Replacing Armrest

⚠ WARNING

Make sure the armrest release lever is in the locked position before using the wheelchair.

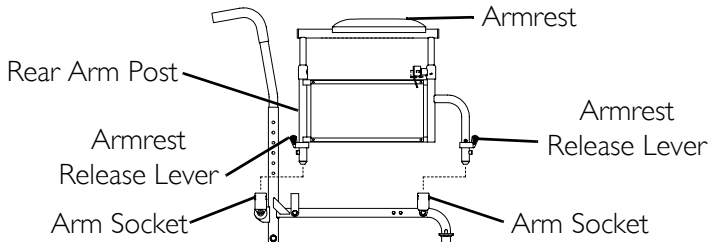
Heavy duty, fixed height armrests are identified by a circular mark on the rear arm post above or below the armrest release lever.

NOTE: For this procedure, refer to FIGURE 5.3.

NOTE: This procedure does not apply to wheelchairs equipped with space saver arms.

Removing Armrests

1. Unlock the armrest by turning the armrest release levers towards the outside of the wheelchair.
2. Lift armrest completely out of arm sockets from the wheelchair.



NOTE: Identifying circular mark located on the rear arm post above or below the release lever.

FIGURE 5.3 Removing or Replacing Armrest

Replacing Armrests

NOTE: Armrest release levers MUST be in the unlocked position when placing armrest into the arm sockets.

1. Place armrest into arm sockets located on the side of the wheelchair.
2. Lock the armrest by turning the armrest release levers towards the inside of the wheelchair.

Replacing Desk/Full Length Armrest Pad (Fixed Height Arms Only)

NOTE: For this procedure, refer to FIGURE 5.4.

1. Remove the mounting screws that secure the armrest pad to the armrest assembly.
2. Replace armrest pad and securely tighten with the existing mounting screws.

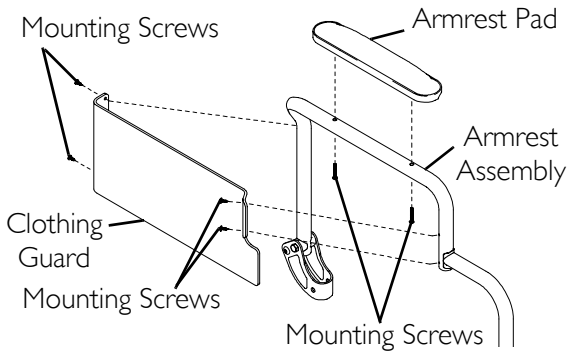


FIGURE 5.4 Replacing Desk/Full Length Armrest Pad (Fixed Height Arms Only)

Replacing Clothing Guards (Fixed Height Arms Only)

NOTE: For this procedure, refer to FIGURE 5.4.

1. Remove the four mounting screws that secure the existing clothing guard to the armrest assembly.
2. Install new clothing guard and securely tighten with the existing mounting screws.

Converting Between Space Saver and Conventional Arms

NOTE: For this procedure, refer to FIGURE 5.5 on page 37.

1. Remove the arms from the wheelchair. Refer to Removing or Replacing Armrest on page 35.
2. Remove the locknut and hex screw that secure the arm socket to the wheelchair frame.
3. Repeat STEP 2 for the opposite side of the wheelchair.
4. Reposition the arm socket to one of two positions:

ARM TYPE	ARM SOCKET POSITION (ON WHEELCHAIR FRAME)
CONVENTIONAL	Outside
SPACE SAVER	Inside

NOTE: Make sure arm sockets sit flush against the wheelchair frame.

5. Reinstall the hex screw and locknut that secure the arm socket to the wheelchair frame and securely tighten.
6. Repeat STEP 5 for the opposite side of the wheelchair.
7. Install the new arms onto the wheelchair. Refer to Removing or Replacing Armrest on page 35.
8. Refer to the following chart to determine if the rear wheel axle spacer is needed:

ARM TYPE	AXLE SPACER NEEDED?
CONVENTIONAL	Yes
SPACE SAVER	No

9. If rear wheel axle spacer is needed, refer to Removing/Installing the Rear Wheels on page 41.

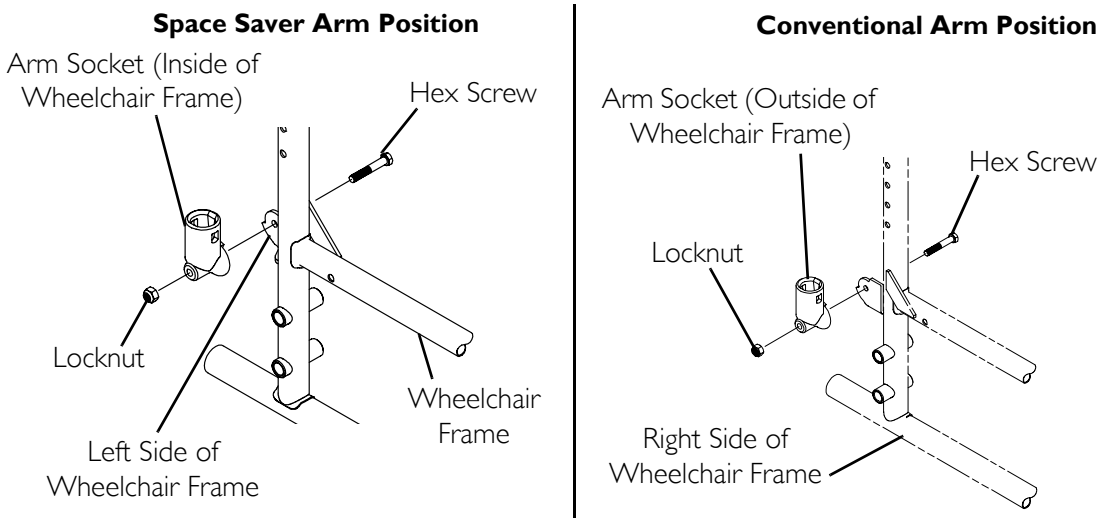


FIGURE 5.5 Converting Between Space Saver and Conventional Arms

SECTION 6—SEAT AND BACK

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

NOTE: The procedures in this section apply to non-recliner models only. For recliner models, refer to Recliner on page 48.

Replacing Seat Upholstery

NOTE: For this procedure, refer to FIGURE 6.1.

1. Remove the mounting screws that secure the existing seat upholstery to the wheelchair frame.

NOTE: The following chart determines the number of mounting screws for each seat depth.

2. Remove the existing seat upholstery from the wheelchair frame.
3. Install new seat upholstery by reversing STEPS 1-2.

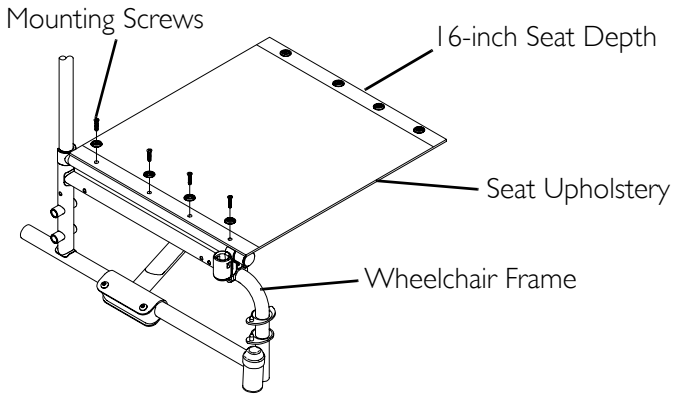


FIGURE 6.1 Replacing Seat Upholstery

Replacing Back Upholstery

Screw-On Back Upholstery

NOTE: For this procedure, refer to FIGURE 6.2.

1. Flip swing-back arms up and out of the way. Refer to Using Swing-Back Arms on page 34.
2. Remove the six mounting screws and washers that secure the existing back upholstery to the back canes.
3. Cut the tie wraps that secure the existing back upholstery to the wheelchair frame.
4. Securely tighten the new back upholstery to the back canes with the six mounting screws and washers starting with the top hole of the back cane.
5. Install two new tie wraps through the bottom holes of the upholstery to tie the bottom of the back upholstery to the back canes.
6. Flip swing-back arms down for use. Refer to Using Swing-Back Arms on page 34.

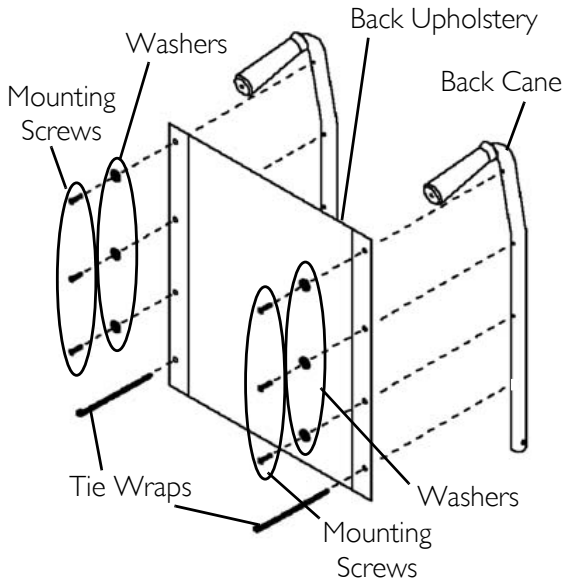


FIGURE 6.2 Replacing Back Upholstery - Screw-On Back Upholstery

Installing the Seat Positioning Strap

⚠ WARNING

ALWAYS wear your positioning strap. Inasmuch as the seat positioning strap is an option on this wheelchair (You may order with or without the seat restraint), Invacare strongly recommends ordering the seat positioning strap as an additional safeguard for the wheelchair user.

NOTE: For this procedure, refer to FIGURE 6.3 on page 40.

1. Remove the bottom back upholstery screw from the wheelchair.
2. Position the seat positioning strap half between the back cane and back upholstery.
3. Secure the back upholstery and seat positioning strap to the wheelchair with the existing back upholstery screw.
4. Repeat STEPS 1-3 for the opposite side of the wheelchair.

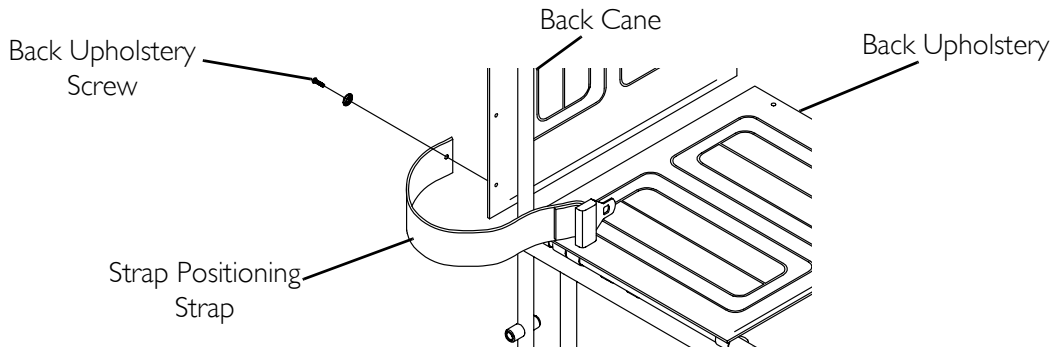


FIGURE 6.3 Installing the Seat Positioning Strap

Installing/Replacing Chest Positioning Straps

NOTE: For this procedure, refer to FIGURE 6.4.

Installing

1. Position the chest positioning strap to one of the holes on the back cane.

NOTE: The standard recommended position for the chest positioning strap is in the top hole of the back cane, but may be mounted according to the user's needs.

2. Secure the chest positioning strap to the back canes with the new/existing hex screw and locknut (FIGURE 6.4).
3. Repeat STEPS 1-2 for opposite side.

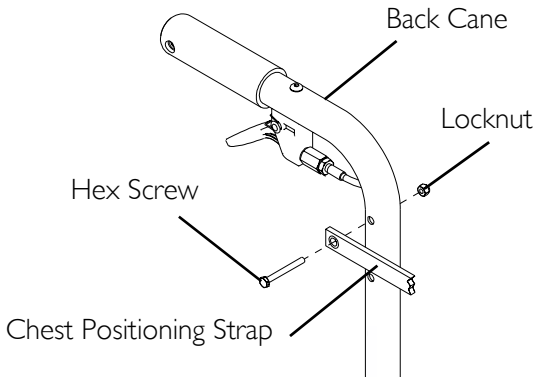


FIGURE 6.4 Installing/Replacing Chest Positioning Straps

Replacing

1. Remove the hex screw that secures the chest positioning strap to the back cane.
2. Discard existing chest positioning strap.
3. Repeat STEPS 1-2 for opposite side, if necessary.
4. Install the new chest positioning strap. Refer to Installing/Replacing Chest Positioning Straps on page 40.

SECTION 7—REAR WHEELS

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

NOTE: Except where noted, the procedures in this section apply to non-recliner models only. For recliner models, refer to Recliner on page 48.

Removing/Installing the Rear Wheels

NOTE: For this procedure, refer to FIGURE 7.1.

NOTE: If replacing the same size rear wheel, note the mounting position on the wheelchair frame for proper reinstallation of the new rear wheel.

1. Remove the dust cap *(if applicable)*, mounting screw and locknut that secure the rear wheel and axle spacer to the wheelchair.
2. Repeat STEP 1 for the opposite rear wheel.
3. To reinstall the rear wheel onto the wheelchair, reverse STEPS 1-2.

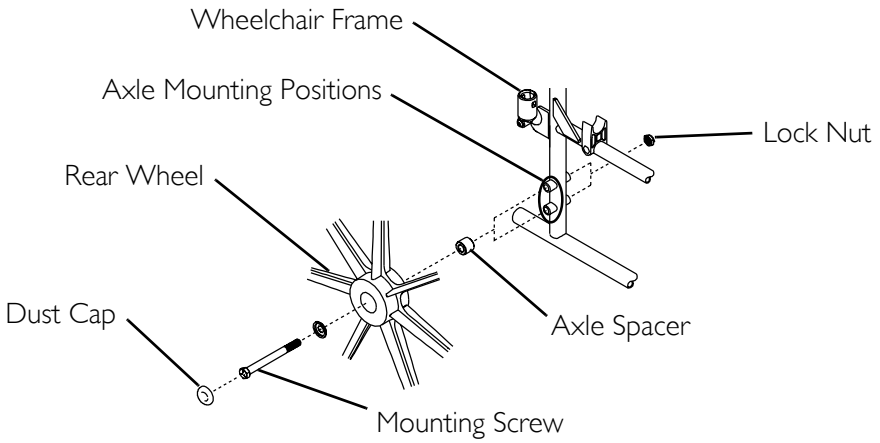


FIGURE 7.1 Removing/Installing the Rear Wheels

Replacing Rear Wheel Handrim

⚠ WARNING

Wheelchairs with 300lbs weight limit: DO NOT use composite handrims. Otherwise injury or damage may occur.

NOTE: For this procedure, refer to FIGURE 7.2.

1. Remove the rear wheel from the wheelchair. For non-recliner models, refer to Removing/Installing the Rear Wheels on page 41. For recliner, refer to Removing/Installing Rear Wheels on page 52.
2. Remove the mounting screws that secure the handrim to the rear wheel.
3. Remove the existing handrim.
4. Install the new handrim by reversing the preceding steps.

⚠ WARNING

Make sure detent pin and detent balls of the quick-release axles are fully released before operating the wheelchair.

5. Reinstall rear wheel to the wheelchair. Refer to Removing/Installing the Rear Wheels on page 41.
6. Repeat STEPS 1-5 for the opposite rear wheel if necessary.

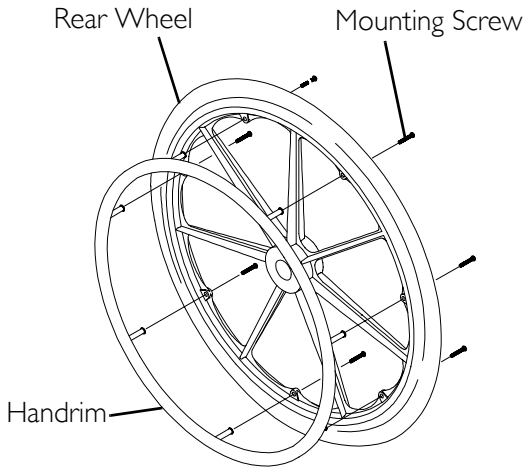


FIGURE 7.2 Replacing Rear Wheel Handrim

Replacing/Repairing Rear Wheel Tire/Tube

⚠ WARNING

Replacement of rear wheel tire or tube MUST be performed by a qualified technician.

SECTION 8—FRONT CASTERS

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

Removing/Installing the Front Caster

NOTE: For this procedure, refer to FIGURE 8.1.

NOTE: Reverse this procedure to install the front caster.

1. Remove the hex screw, washers (if so equipped) and locknut that secure the front caster to the fork.
2. Reposition the front caster on the fork to the determined mounting hole.
3. Secure front caster to fork with existing hex screw and locknut. Securely tighten.

⚠ WARNING

Make sure both front casters are positioned in the same mounting hole before using the wheelchair. Otherwise, injury may result.

4. Repeat STEPS 1-3 for the opposite front caster.

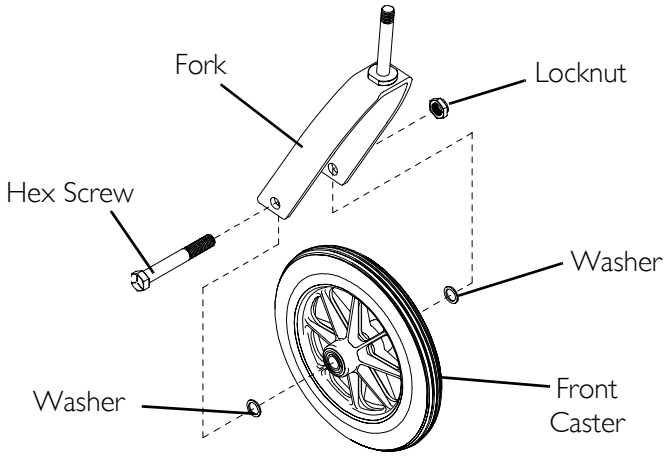


FIGURE 8.1 Removing/Installing the Front Caster

Replacing Front Forks

NOTE: For this procedure, refer to FIGURE 8.2 on page 45.

1. Remove the front caster. Refer to Removing/Installing the Front Caster on page 43.
2. Remove the mounting screw securing the dust cover to the head tube.
3. Perform one of the following:
   A. 8 X 1 and 8 X 1¼ inch casters (Detail "A") -
      i. Remove the locknut, nylon washer, steel washer, and the top bearing and sleeve securing the fork to the headtube.
      ii. Remove the fork stem and the bottom bearing and sleeve from the headtube.
      iii. Remove the bottom bearing and sleeve from the fork stem.
   B. 8 X 1¾ and 8 X 2 inch casters (Detail "B") -
      i. Remove the locknut, the top bearing and sleeve and two steel washers securing the fork stem to the headtube.
      ii. Remove the fork, stem and the bottom bearing and sleeve from the headtube.
      iii. Remove the bottom bearing and sleeve from the fork stem.
4. Reassemble by reversing STEP 3.
5. Install front caster. Refer to Removing/Installing the Front Caster on page 43.
6. If necessary, repeat STEPS 1-3 for the opposite fork.
7. To properly tighten caster journal system and guard against flutter, perform the following check:
   A. Tip back of wheelchair to floor.
   B. Pivot both forks and casters to top of their arc simultaneously.
   C. Let casters drop to bottom of arc (wheels should swing once to one-side, then immediately rest in a straight downward position).
   D. Adjust locknuts according to freedom of caster swing.
8. Test wheelchair for maneuverability.
9. Readjust locknuts if necessary, and repeat STEPS 7-8 until correct.
10. Snap dust cover over the headtube and secure with mounting screw.

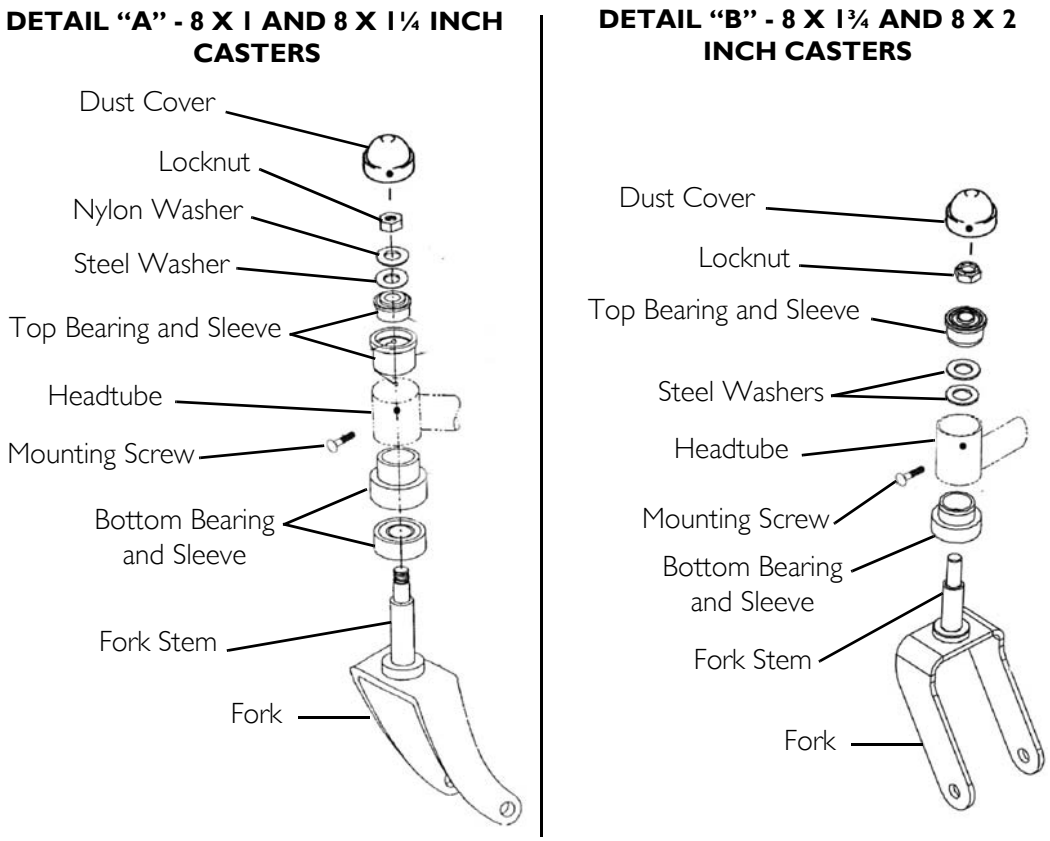


FIGURE 8.2 Replacing Front Forks

SECTION 9—ANTI-TIPPERS

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

Installing/Adjusting Anti-tippers

⚠ WARNING

Anti-tippers MUST be fully engaged and release buttons fully protruding out of adjustment holes.

ALWAYS use anti-tippers. When outdoors on wet, soft ground or on gravel surfaces, anti tippers may not provide the same level of protection against tipover. Extra caution must be observed when traversing such surfaces.

Ensure both anti-tippers are adjusted to the same mounting hole.

Installing Anti-Tippers

NOTE: For this procedure, refer to FIGURE 9.1.

1. Remove plug button (not shown) from end of rear frame tubing and install anti-rattles if not already installed.
2. Press the release buttons in and insert the anti-tippers with the anti-tipper wheels pointing toward the ground/floor into the rear frame tubing until the bottom release button locks in place.
3. Measure the distance between the bottom of the anti-tipper wheels and the ground/floor.

NOTE: A 1½ to 2-inch clearance between the bottom of the anti-tipper wheels and the ground/floor MUST be maintained at all times.

4. If the distance between the bottom of anti-tipper wheels and the ground/floor is not 1½ to 2-inches, adjust anti-tippers. Refer to Adjusting Anti-Tippers on page 47.

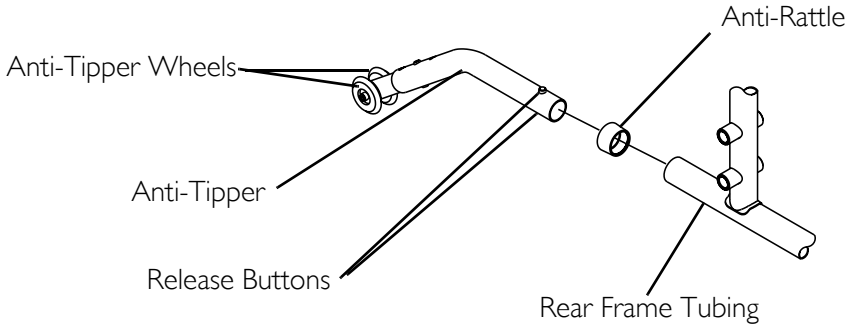


FIGURE 9.1 Installing Anti-Tippers

Adjusting Anti-Tippers

NOTE: For this procedure, refer to FIGURE 9.2.

1. Press the release buttons on the wheeled portion of the anti-tipper and slide it up or down to achieve the 1-1/2 to 2-inch clearance (Detail "A").
2. Check to make sure that the release buttons are fully engaged in adjustment holes.

NOTE: Refer to Detail "B" in FIGURE 9.2 and to the following charts to ensure the correct anti-tipper is installed in the wheelchair. Anti-tipper length measurement is taken with the extension tube in the longest position available.The anti-tipper height measurement MUST be taken with the anti-tipper on a flat surface.

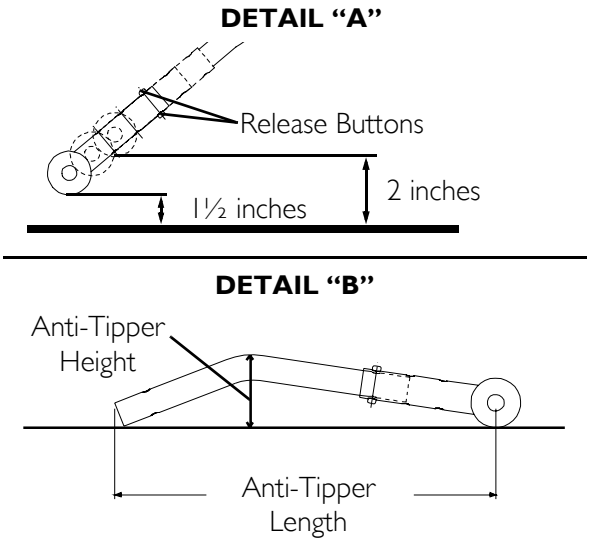


FIGURE 9.2 Adjusting Anti-Tippers

CASTER SIZE	CHAIR TYPE	ANTI-TIPPER LENGTH/HEIGHT	ON CHAIR	OFF CHAIR KIT NUMBER
8-inch	Non-Recliner	11-5/8 / 2-3/4-inches	1358M	1036900
8-inch	Recliner	13-1/2 / 3-1/2-inches	1358N	1036901

SECTION 10—RECLINER

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

Operating Recliner

⚠ WARNING

ALWAYS make sure that the wheelchair is stable before using the recliner option.

ALWAYS wear your seat positioning strap. Inasmuch as the seat positioning strap is an option on this wheelchair (you may order with or without the seat positioning strap), Invacare strongly recommends ordering the seat positioning strap as an additional safeguard for the wheelchair user.

Ensure the spreader bar is attached and secured before using the Recliner.

TO HEALTHCARE PROFESSIONALS/ASSISTANTS:

Make sure occupant's hands and body are clear of all pinch points before reclining back. Pinch Points exist between spreader bar and recliner mechanism. Use caution, otherwise injury may occur.

When returning the occupant of the wheelchair to the full upright position, more body strength will be required for approximately the last twenty degrees of incline (sitting up). Make sure to use proper body mechanics (use your legs) or seek assistance if necessary to avoid injury.

ALWAYS engage both wheel locks while reclining or inclining (sitting up) the wheelchair.

Make sure the occupant is properly positioned in the wheelchair before reclining or inclining (sitting up) to maintain maximum stability and safety. Refer to Safety/Handling of Wheelchairs on page 17.

NOTE: For this procedure, refer to FIGURE 10.1 on page 49.

1. Unfold wheelchair. Refer to Safety/Handling of Wheelchairs on page 17.
2. Attach spreader bar. Refer to Storing/Replacing Spreader Bar on page 51.
3. Adjust the tightness of the headrest/back upholstery. Refer to Adjusting Headrest/Back Upholstery Tension on page 51.
4. Make sure wheelchair is occupied and on a level surface before reclining.
5. Engage the wheel locks. Refer to Using/Adjusting Wheel Locks on page 53.
6. Inform the occupant of the wheelchair that the wheelchair is about to be reclined.
7. Make sure occupant's hands and body are clear of all pinch points.
8. Stand behind the wheelchair and grasp both push handles firmly.

9. Squeeze release handles.
10. Slowly pull back on the back assembly while squeezing the release handles.
11. When the back reaches the desired angle, slowly let go of the release handles.
12. To return the back to the full upright position, reverse STEPS 8-11 keeping in mind proper body mechanics.

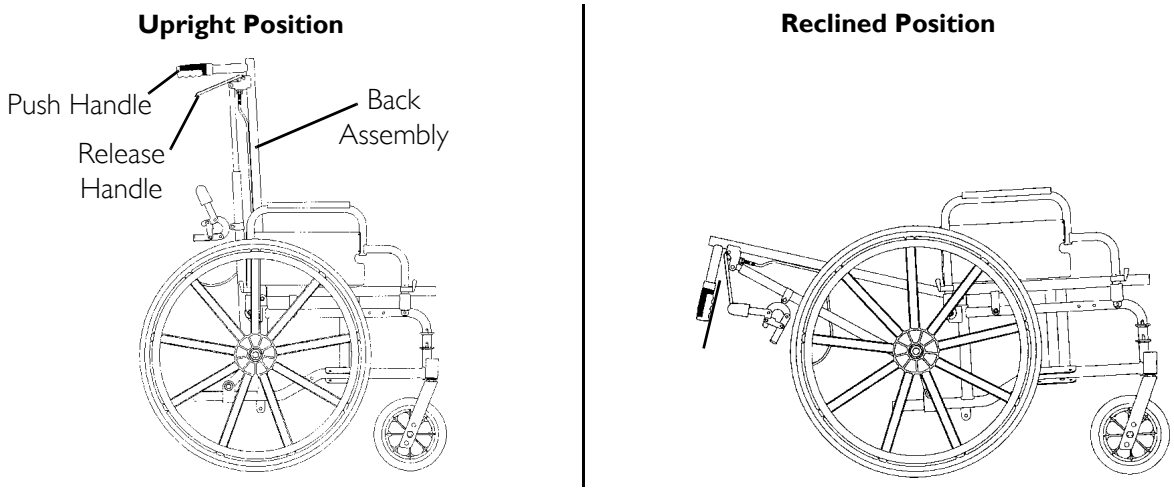


FIGURE 10.1 Operating Recliner

Replacing Headrest Pillow

NOTE: For this procedure, refer to FIGURE 10.2.

1. Unfasten straps of headrest pillow from behind headrest upholstery.
2. Secure straps of the new headrest pillow onto fastening strips located on back of headrest upholstery.

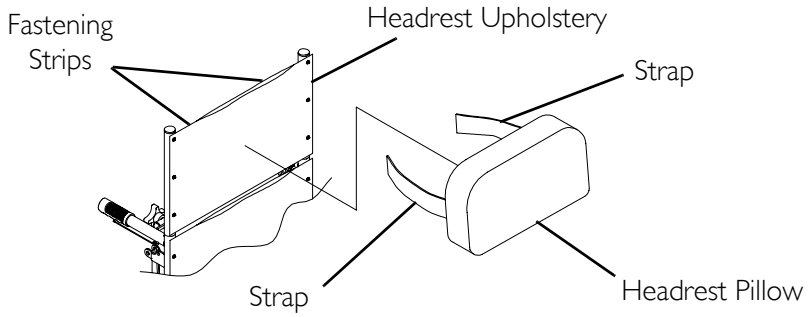


FIGURE 10.2 Replacing Headrest Pillow

Replacing Headrest/Back Upholstery

NOTE: For this procedure, refer to FIGURE 10.3.

Headrest Upholstery

1. Remove the headrest pillow. Refer to Replacing Headrest Pillow on page 49.
2. Remove the six mounting screws that secure the headrest upholstery to the headrest extension tubes.
3. Secure new headrest upholstery onto headrest extension tubes with the existing six mounting screws.
4. Install headrest pillow. Refer to Replacing Headrest Pillow on page 49.

Back Upholstery

1. Remove one knob from one side of the spreader bar.
2. Loosen, but DO NOT remove the remaining knob.

NOTE: To remove and install the bottom two mounting screws of the back upholstery, the wheelchair must be partially folded.

3. Remove the twelve mounting screws that secure the back upholstery to the back canes.

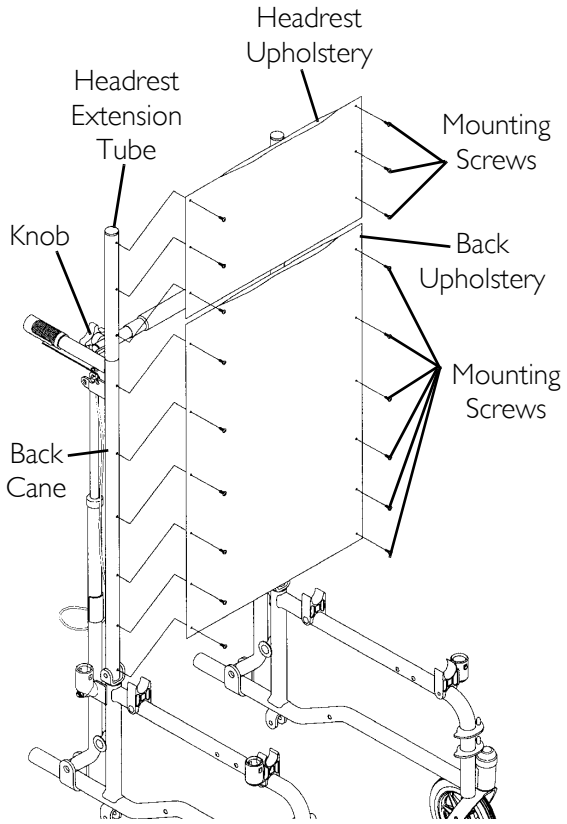


FIGURE 10.3 Replacing Headrest/Back Upholstery

4. Secure the new back upholstery to the back canes with the existing twelve mounting screws. Securely tighten.
5. Install the knob removed in STEP 1 to secure spreader bar to side frame. Securely tighten both knobs.

Adjusting Headrest/Back Upholstery Tension

NOTE: For this procedure, refer to FIGURE 10.4.

1. Rotate the spreader bar in one of the following directions:
   - Counterclockwise (away from back upholstery) to loosen back/headrest upholstery.
   - Clockwise (towards back upholstery) to tighten back/headrest upholstery.

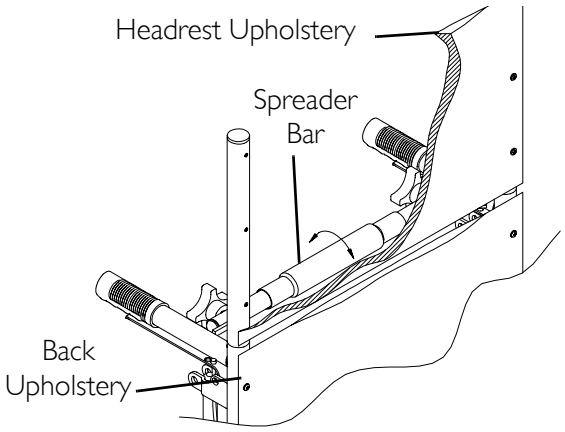


FIGURE 10.4 Adjusting Headrest/Back Upholstery Tension

Storing/Replacing Spreader Bar

Storing Spreader Bar

NOTE: For this procedure, refer to FIGURE 10.5.

NOTE: When folding the recliner for either storage or transporting. One side of the spreader bar must be removed and placed in a vertical position alongside the recliner tube.

Removing From Stored Position

1. Rotate the end of the spreader bar 90° toward the opposite side frame.
2. Install threaded end of locking knob into locknut located on the opposite side frame. Securely tighten both knobs.

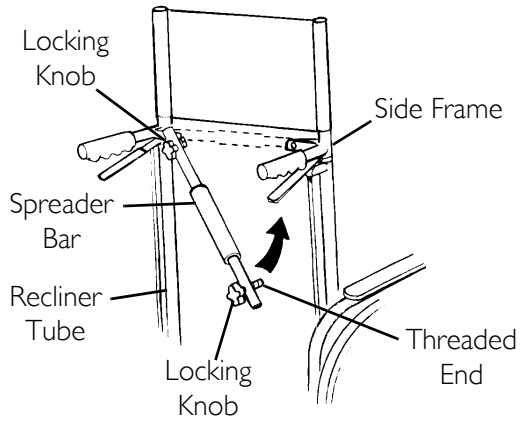


FIGURE 10.5 Storing/Replacing Spreader Bar

Placing In Stored Position

1. Remove one locking knob from the spreader bar.
2. Loosen the remaining locking knob on the spreader bar.
3. Rotate detached end of the spreader bar 90° down toward floor.

Replacing Spreader Bar

NOTE: For this procedure, refer to FIGURE 10.6.

1. Remove both locking knobs that secure the spreader bar to the side frames.
2. Remove existing spreader bar.
3. Secure new spreader bar to the side frames with the existing locking knobs. Securely tighten.

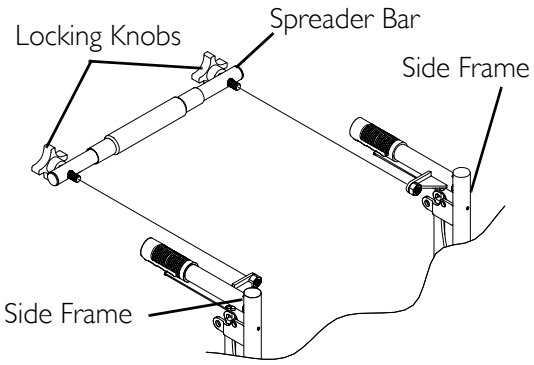


FIGURE 10.6 Replacing Spreader Bar

Removing/Installing Rear Wheels

NOTE: Use this procedure to replace a rear wheel with one of the same size.

With Patient Operated Wheel Locks

NOTE: For this procedure, refer to FIGURE 10.7.

1. Remove the axle mounting screw and locknut that secure the patient operated wheel lock, spacers, and rear wheel to the wheelchair frame.
2. Secure rear wheel, patient operated wheel lock, and spacers to wheelchair frame with axle mounting screw and locknut. Securely tighten.
3. Adjust the patient operated wheel locks. Refer to Adjusting Patient-Operated Wheel Locks on page 56.

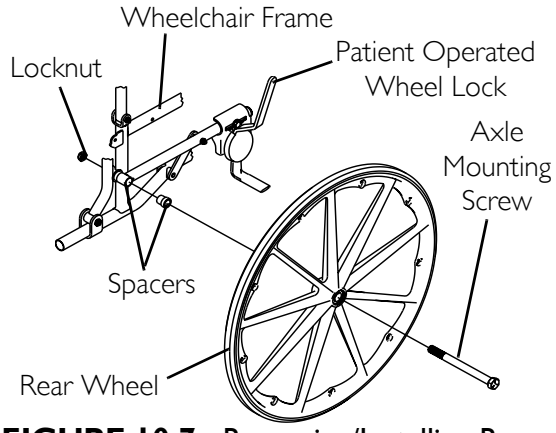


FIGURE 10.7 Removing/Installing Rear Wheels - With Patient Operated Wheel Locks

With Attendant Operated Wheel Locks

NOTE: For this procedure, refer to FIGURE 10.8.

1. Remove the axle mounting screw and locknut that secure the rear wheel and spacer to the wheelchair frame.
2. Remove rear wheel from side frame.
3. Secure rear wheel and spacer to wheelchair frame with axle mounting screw and locknut. Securely tighten.
4. Adjust the attendant operated wheel locks. Refer to Adjusting Patient Operated Wheel Locks on page 53.

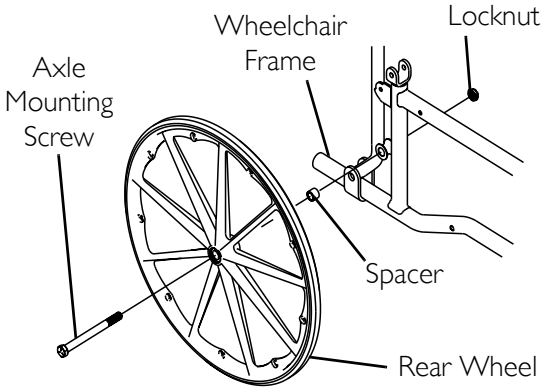


FIGURE 10.8 Removing/Installing Rear Wheels - With Attendant Operated Wheel Locks

Using/Adjusting Wheel Locks

NOTE: For Using and/or Adjusting of Patient Operated Wheel Locks, refer to Wheel Locks on page 55.

Using Patient Operated Wheel Locks

⚠ WARNING

DO NOT attempt to stop a moving wheelchair with wheel locks. Wheel locks are not brakes.

NOTE: For this procedure, refer to FIGURE 10.9.

1. Perform one of the following:
   - Engage - Apply pressure downward on wheel lock handle.
   - Disengage - Lift up on wheel lock handle.

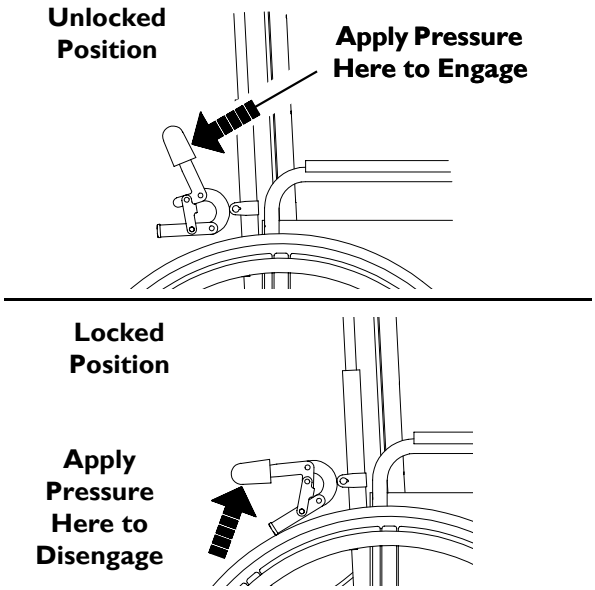


FIGURE 10.9 Using Patient Operated Wheel Locks

Adjusting Patient Operated Wheel Locks

NOTE: For this procedure, refer to FIGURE 10.10 on page 54.

NOTE: If wheels are pneumatic, before adjusting or replacing the wheel lock assemblies, ensure that the tires are inflated to the recommended psi located on the side wall of tire.

1. Loosen the bolt and locknut that secure the wheel lock to the recliner tube.
2. Adjust the position of wheel lock so that when engaged, the wheel lock shoe embeds the tire 1/8-inch (3/16-inch for pneumatic tires) and holds the wheelchair.
3. Securely tighten the bolt and locknut.

4. Engage wheel lock and push against the wheelchair and determine if wheel lock engages the wheel lock shoe enough to hold the wheelchair.
5. Repeat the above procedures until the wheel lock holds the wheelchair.
6. Repeat STEPS 1-5 for the opposite wheel lock.

NOTE: Ensure the wheel lock shoe completely covers the tire contact area. See Detail "A" for proper positioning of wheel lock shoe.

DETAIL "A" - WHEEL LOCK SHOE ENGAGEMENT

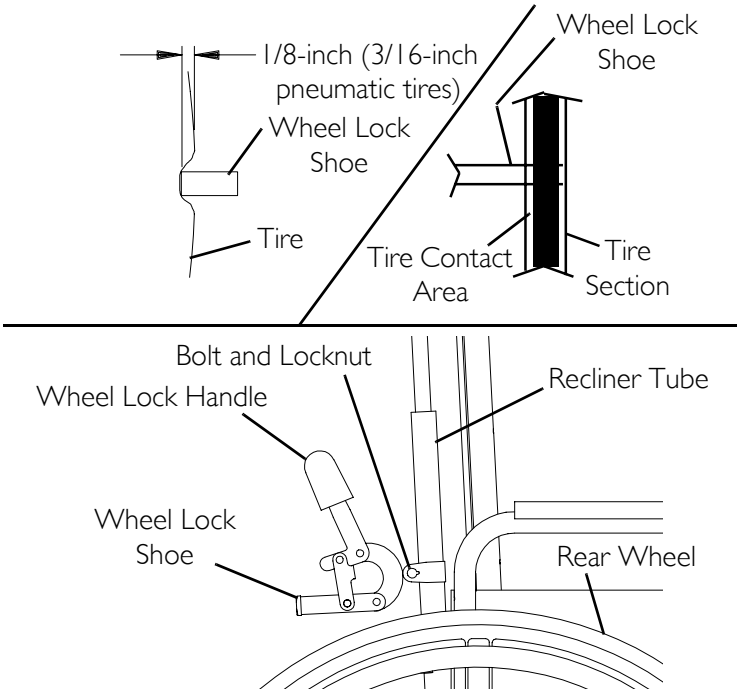


FIGURE 10.10 Adjusting Patient Operated Wheel Locks

SECTION 11—WHEEL LOCKS

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

NOTE: The procedures in this section apply to non-recliner models only except where noted. For the recliner, refer to Recliner on page 48.

Using Patient Operated Wheel Locks

⚠ WARNING

DO NOT attempt to stop a moving wheelchair with wheel locks. Wheel locks are not brakes.

NOTE: For this procedure, refer to FIGURE 11.1.

NOTE: Position wheelchair on a flat, level surface to perform this procedure.

1. Ensure the wheelchair is not moving before engaging the wheel locks.
2. Depending on the model of wheel lock installed on the wheelchair, perform one of the following:
   - Push-to-Lock - To engage, push the wheel lock handle forward.
   - Pull-to-Lock - To engage, pull the wheel lock handle backward.
3. Disengage the wheel locks by reversing STEP 2.

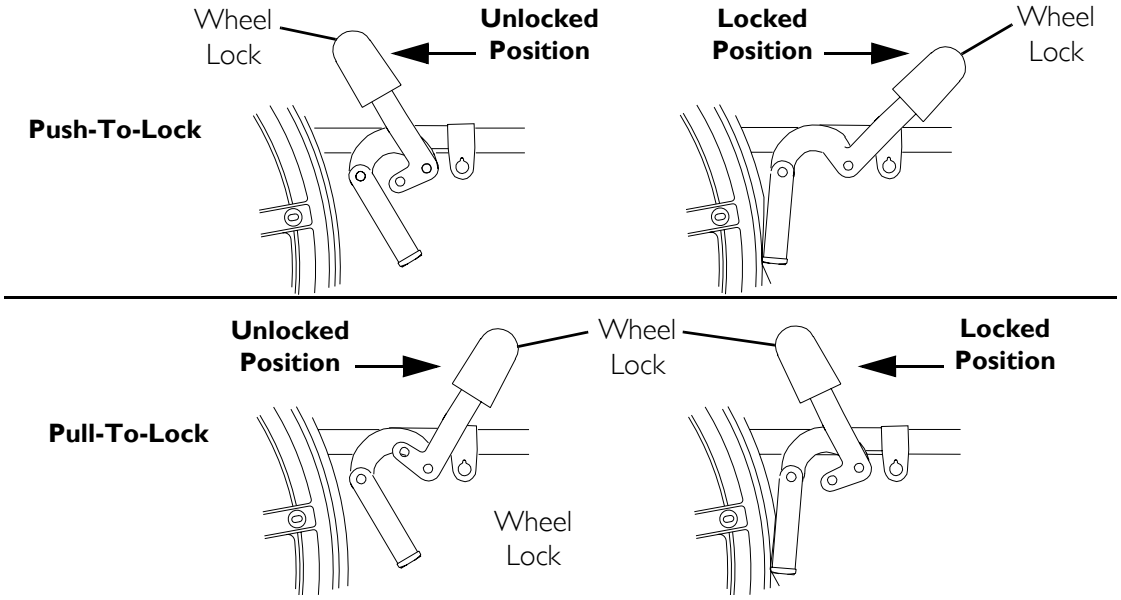


FIGURE 11.1 Using Patient Operated Wheel Locks

Adjusting Patient-Operated Wheel Locks

NOTE: For this procedure, refer to FIGURE 11.2.

NOTE: The push-or-pull-to-lock wheel locks are also an option on the recliner.

NOTE: If wheels are pneumatic, before adjusting or replacing the wheel lock assemblies, ensure that the tires are inflated to the recommended psi on the side wall of tire. The recommended tire pressure is located on the side wall of the tire.

1. Disengage the wheel locks.
2. Loosen the bolt and locknut that secure the wheel lock to the wheelchair frame.
3. Reposition the wheel lock so that when engaged, the wheel lock shoe embeds the tire 1/8-inch (3/16-inch for pneumatic tires) and holds the occupied wheelchair in place when pushed.
4. Securely tighten the bolt and locknut securing the wheel lock to the wheelchair frame.
5. Engage the wheel lock.
6. Measure the distance the wheel lock is embedded into the tire as shown in FIGURE 11.2.

NOTE: Any wheel lock adjustment should embed the wheel lock shoe at least 1/8-inch (3/16-inch if pneumatic tire) into the tire when engaged (Detail "A").

7. Repeat STEPS 1-6 until the wheel lock shoe embeds the tire 1/8-inch (3/16-inch for pneumatic tires) and holds the occupied wheelchair in place when pushed (Detail "A").
8. Repeat STEPS 1-7 for the opposite wheel lock.
9. Engage both wheel locks and ensure the occupied wheelchair is held in place when pushed.

⚠ WARNING

If wheel locks do not hold the occupied wheelchair in place, contact a qualified technician. Otherwise injury or damage may occur.

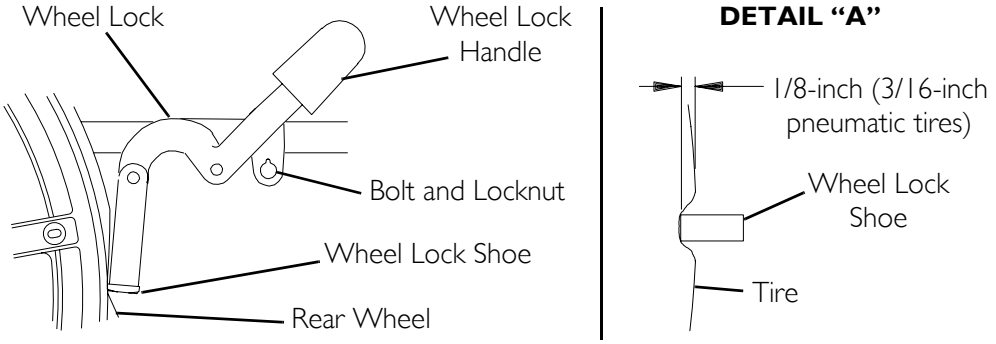


FIGURE 11.2 Adjusting Patient-Operated Wheel Locks

SECTION 12—OPTIONS

⚠ WARNING

After any adjustments, repair or service and before use, make sure all attaching hardware is tightened securely. Otherwise injury or damage may occur.

NOTE: The options in this section refer to non-recliner models only. Refer to Recliner on page 48 for recliner options.

Installing/Cleaning Telescoping I.V. Rod/O_2 Holders

NOTE: For this procedure, refer to FIGURE 12.1 on page 58.

Installing

⚠ WARNING

The telescoping I.V. rod/O_2 holder must be checked weekly to ensure it is tightly secured to the wheelchair frame. If there is any looseness whatsoever, tighten the attachment hardware securely before using.

Telescoping I.V. Rod Holder Only - Make sure the telescoping I.V. rod is tightly locked before placing I.V. medication on the rod.

The telescoping I.V. rod is designed to support I.V. medication only. DO NOT use it to support objects other than I.V. medication.

1. Slide telescoping I.V. rod/O_2 holder over the step tube of the wheelchair.

NOTE: Mounting bracket of telescoping I.V. rod/O_2 holder should be positioned between the two axle mounting positions on wheelchair frame.

2. Secure telescoping I.V. rod/O_2 holder to the wheelchair frame with hex screw, spacer and locknut.
3. Telescoping I.V. Rod Holder Only - Secure the top of the telescoping I.V. rod holder to the wheelchair frame with a tie wrap.

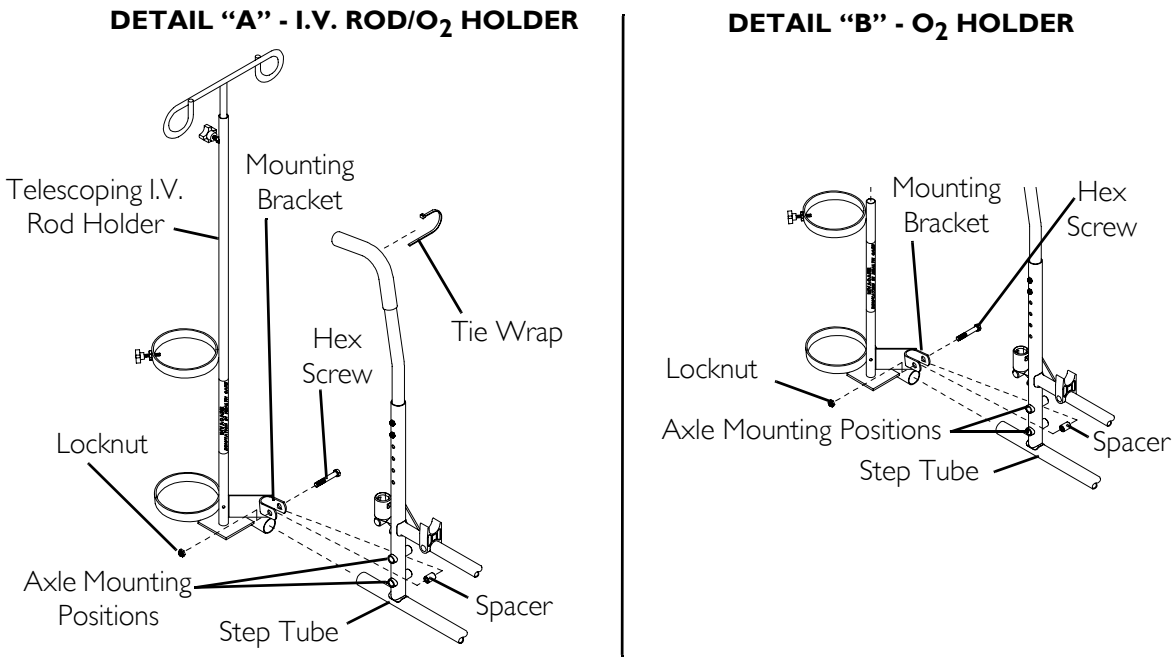


FIGURE 12.1 Installing/Cleaning Telescoping I.V. Rod/O2 Holders

Cleaning

⚠ WARNING

The user and O_2 cylinder must be removed from the wheelchair when cleaning the O_2 holder. Otherwise, injury or damage may occur if cleaning agents come in contact with the O_2 regulator.

1. Remove the user, any I.V. medication and the O_2 cylinder from the wheelchair.
2. The telescoping I.V. rod/O_2 holders clean easily with any household glass type cleaner.
3. After the cleaning solution has dried, it is safe for the user to re-occupy the wheelchair.

Installing Crutch and Cane Carrier

⚠ WARNING

Check base weekly to ensure proper placement.

When loading the crutch/cane carrier, ensure items are securely placed into the base. Also ensure that there is no interference with folding the wheelchair, the rear wheels, or the swing-back arms.

Strap must be securely fastened while carrying items.

NEVER insert or remove items while wheelchair is moving.

NOTE: For this procedure, refer to FIGURE 12.2.

1. Slide the clamp with the base attached over the end of the step tube of the wheelchair. Ensure the base is towards the inside of the wheelchair.
2. Position the base parallel to the step tube.

CAUTION

Base should be parallel to step tube to avoid bending spokes when folding the wheelchair.

3. Securely tighten the locstknut that secures the base to the step tube of the wheelchair.
4. Remove the upper back upholstery screw and washer.
5. Align the strap with the back upholstery screw mounting hole.
6. Reinstall the back upholstery screw and washer and secure the strap to the wheelchair.
7. The base cleans easily with any chrome or glass cleaner. The strap can be cleaned with mild soap and water.

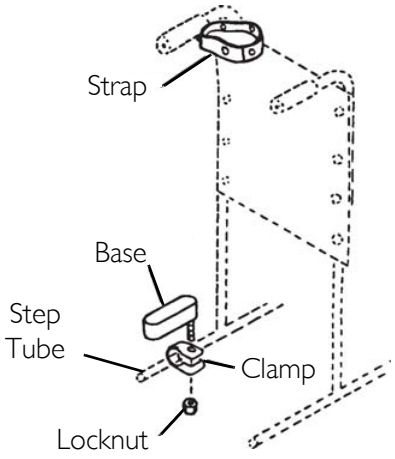


FIGURE 12.2 Installing Crutch and Cane Carrier

Installing Amputee Bracket

NOTE: For this procedure, refer to FIGURE 12.3.

1. Remove the plug button or anti-tipper from the step tube of the wheelchair frame.
2. Slide the amputee attachment over the step tube of the wheelchair.
3. Secure the amputee attachment to the wheelchair with the hew screw, spacer and locknut.
4. Reinstall the plug button or anti-tipper onto the step tube of the wheelchair frame.
5. Repeat STEPS 1-4 for the opposite side of the wheelchair.
6. Reposition the rear wheels. Refer to Removing/Installing the Rear Wheels on page 41.

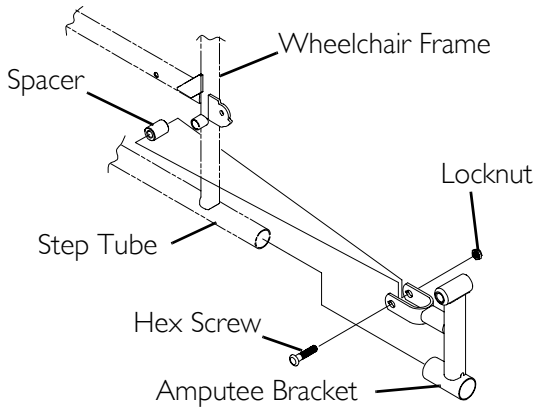


FIGURE 12.3 Installing Amputee Bracket

Installing/Removing One-Piece Footboard

NOTE: For this procedure, refer to FIGURE 12.4 on page 62.

NOTE: Right and left sides of the wheelchair are determined from the occupant's position.

NOTE: Only the right footboard support assembly is secured to the footboard.

NOTE: When in the upright position, the footboard will be vertical and resting against the inside of the right footboard support assembly.

Installing

1. If necessary, remove the two existing swingaway footrest assemblies from the wheelchair by performing the following:
   A. Push the footrest release lever inward.
   B. Rotate swingaway footrest assembly outward.
   C. Lift the swingaway footrest assembly off of the hinge pins.
   D. Repeat STEPS A-C for the other footrest assembly.
2. With the footboard in the up position, pull the footboard support release lever and position the right footboard assembly support in front of the wheelchair.
3. Install the hinge plates on the footboard support assembly onto the hinge pins on the wheelchair frame.
4. Push the footboard support assembly towards the inside of the wheelchair until it locks into place.
5. Repeat STEPS 2-4 for the left footboard support assembly.
6. With both footboard support assemblies locked into position, lower the footboard into the down position and ensure the footboard clips securely hook over the left lower footboard support tube, behind the end cap.
7. If necessary, adjust the height of the footboard support assembly. Refer to One Piece Footboard Height Adjustment on page 62.

Removing

1. Lift the footboard into the up position.
2. Push the footboard support release lever inward.
3. Rotate the footboard support assembly outward.
4. Lift the footboard support assembly off of the hinge pins.
5. Repeat STEPS 2-4 for the other footboard support assembly.

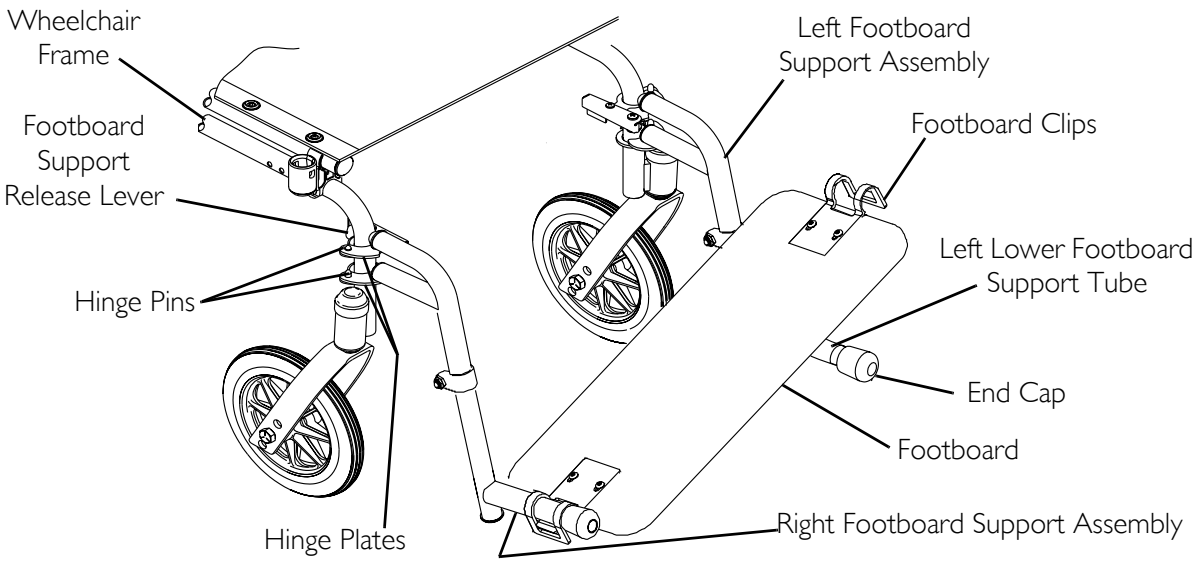


FIGURE 12.4 Installing/Removing One-Piece Footboard

One Piece Footboard Height Adjustment

NOTE: For this procedure, refer to FIGURE 12.5.

1. Remove the footboard support assembly. Refer to Installing/Removing One-Piece Footboard on page 61.

NOTE: Lay the assembly on a flat surface to simplify this procedure.

2. Loosen but DO NOT remove the two bolts and locknuts that secure the lower footboard support tube to the upper footboard supports.

NOTE: Ensure both footboard supports are adjusted to the same height.

3. Reposition the two lower footboard support tubes to the desired height.
4. Securely tighten the two bolts and locknuts that secure the lower footboard support tubes to the upper footboard supports.
5. Reinstall the footboard support assembly. Refer to Installing/Removing One-Piece Footboard on page 61.

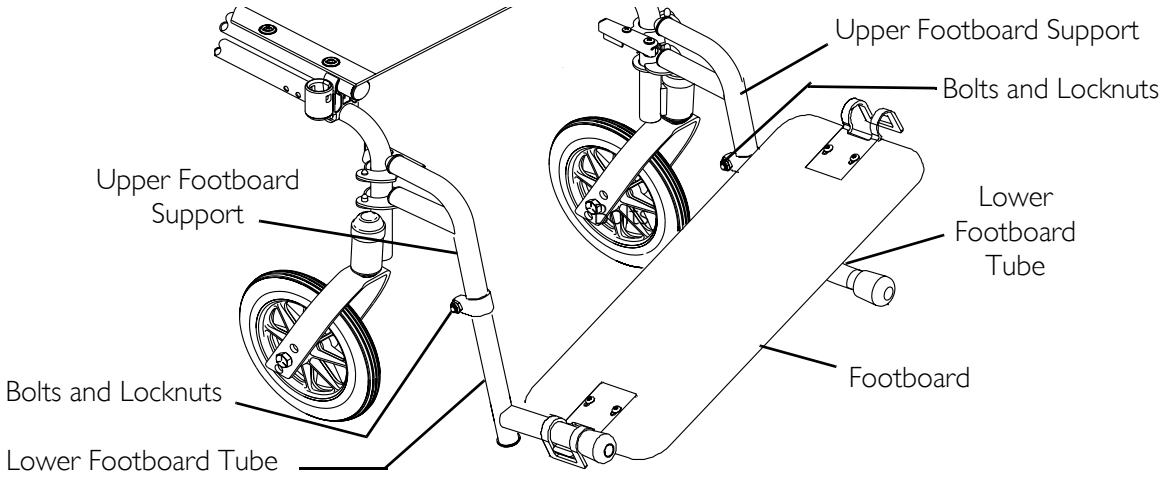


FIGURE 12.5 One Piece Footboard Height Adjustment

LIMITED WARRANTY

PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.

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